

Not surprisingly, given the complexity of the issues and the diverse interests and affiliations of the participants, some controversial and conflicting perspectives are expressed or can be inferred, particularly in relation to behavioral and policy issues.

Concern about acceptability to the consumer of potentially less hazardous cigarettes arises for different reasons. The tobacco industry is presumably not interested in producing cigarettes that do not sell or that make it easier to reduce or quit smoking. Rates of stopping smoking are reported in an American Cancer Society study to be higher in those smoking low-tar, low-nicotine cigarettes, but review of several studies leads another contributor to conclude that light smokers are in general not more likely than heavy smokers to stop and remain off cigarettes. Those primarily concerned with preventing disease realize that health benefits will be greater if large numbers of smokers use less hazardous cigarettes than if very few use even safer cigarettes. Smoking machines can provide chemists and toxicologists with smoke to study, but they cannot measure the satisfaction a smoker gets from cigarettes or the extent to which he or she will compensate for a reduction in total smoke or in specific constituents, such as nicotine, by smoking more cigarettes, taking more puffs, or inhaling more deeply. The possibility that satisfaction and dependency are linked and stem from the same constituents of tobacco smoke does not receive adequate attention. The impact that the health message contained in advertisements for low-tar, low-nicotine cigarettes has is uncertain; the possibility that young people will be encouraged to smoke because less hazardous cigarettes are available is a matter of concern, especially in relation to the risks to babies whose mothers smoke during pregnancy.

The discussion of achievements and future directions in risk reduction will give the reader a good idea of just how difficult it is to determine whether a cigarette is safe. The intent of changing cigarettes is to make them less hazardous, but reducing the risk of contracting one disease, cancer for example, may have no effect on or possibly increase the risk of contracting another, such as coronary heart disease. Similarly, reducing the amount of some toxic components in cigarettes may lead to an increase in the amount of others, and entirely new hazards may be introduced when new materials are substituted for old. The effect of current cigarettes on health can only be determined with certainty by long-term

studies of human populations, which will take decades to complete.

The reader in search of an impartial assessment of so-called safe cigarettes should be aware that the review provided in this book is not comparable to the comprehensive review of evidence on smoking and health undertaken by the Advisory Committee to the Surgeon General in the early 1960's. Although important issues that influence policy concerning less hazardous cigarettes are considered, the opinions of those opposed to the quest for less hazardous cigarettes are not adequately represented. In his summary appraisal, Gori writes, "Evidence has been presented at this meeting that could justify further promotion of less hazardous cigarettes as a major public health endeavor." This endeavor is not advocated by everyone. The recent decision of the National Cancer Institute to deemphasize its safe-cigarette program is more in keeping with the views of those who believe there are better ways to prevent diseases related to smoking and to promote public health.

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(Continued on page 192)

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Literature

Centrifuge Ware Guide is designed to assist scientists in matching rotors, applications, and laboratory ware appropriately. Nalge. Circle 758.

Small Computers offers a variety of new products for home or laboratory use by the individual scientist. Apple Computer. Circle 759.

Affinity Chromatography Guide expresses methods and applications with examples of combinations of techniques and apparatus. Pharmacia Fine Chemicals. Circle 765.

Laboratory Instruments is an extensive catalog that also features accessories. Markson Science. Circle 760.

Gas Products includes over 200 pages of pure gases, mixtures, and gas-handling apparatus. Matheson. Circle 761.

Microcomputers illustrates and describes the TRS-80 computer, its accessories, peripherals, and software. Tandy, Radio Shack. Circle 762.

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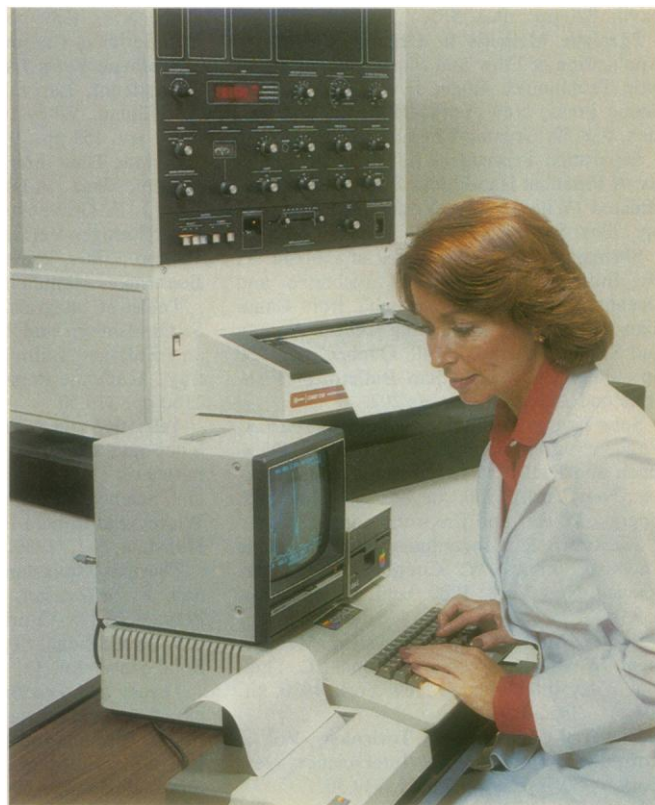
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Synthetic Fuels from Coal. Overview and Assessment. Larry L. Anderson and David A. Tillman. Wiley-Interscience, New York, 1979. xiv, 158 pp., illus. \$16.95.

Systolic Time Intervals. Papers from a symposium, Graz, Austria, Sept. 1978. W. F. List, J. S. Gravenstein, and D. H. Spodick, Eds. Springer-Verlag, New York, 1980. xvi, 304 pp., illus. Paper, \$31.90. International Boehringer Mannheim Symposium.

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Television and Social Behavior. Beyond Violence and Children. A Report of the Committee on Television and Social Behavior, Social Science Research Council. Stephen B. Withey and Ronald P. Abeles, Eds. Erlbaum, Hillsdale, N.J., 1980. x, 356 pp., illus. \$24.95.

Thermal Expansion of Crystals. R. S. Krishnan, R. Srinivasan, and S. Devanarayanan. Pergamon, New York, 1979. x, 306 pp., illus. \$35. International Series in the Science of the Solid State, vol. 12.

Theory and Practice of Early Reading. Papers from conferences, Pittsburgh, 1976. Lauren B. Resnick and Phyllis A. Weaver, Eds. Erlbaum, Hillsdale, N.J., 1979. Three volumes, illus. xiv, 394 pp.; xii, 354 pp.; xii, 386 pp. Each volume, \$24.95.

The Third Century. America as a Post-Industrial Society. Seymour Martin Lipset, Ed. University of Chicago Press, Chicago, 1980. vi, 472 pp., illus. Paper, \$7.95. Reprint of the 1979 edition.

Tissue Culture in Neurobiology. Ezio Giacobini, Antonia Vernadakis, and Abraham Shahr, Eds. Raven, New York, 1980. xviii, 512 pp., illus. \$48.

Topics in Antibiotic Chemistry. Vol. 4, The Chemistry and Antimicrobial Activity of New Synthetic β -Lactam Antibiotics. P. G. Sammes, Ed. Horwood, Chichester, England, and Halsted (Wiley), New York, 1980. 278 pp., illus. \$75.

Topological Methods in Euclidean Spaces. Gregory L. Naber. Cambridge University Press, New York, 1980. x, 230 pp., illus. \$19.95.

Trigonometry for College Students. Karl J. Smith. Brooks/Cole, Monterey, Calif., ed. 2, 1980. xiv, 272 pp., illus. + appendix. \$16.95.

Turfgrass Management. A. J. Turgeon. Reston (Prentice-Hall), Reston, Va., 1980. viii, 392 pp., illus. \$15.95.

Veterinary Pathology in Russian 1860-1930. Leon Z. Saunders. Cornell University Press, Ithaca, 1980. xxii, 330 pp., illus. \$25.

Visual Display Terminals. A Manual Covering Ergonomics, Workplace Design, Health and Safety, Task Organization. A. Cakir, D. J. Hart, and T. F. M. Stewart. Wiley-Interscience, New York, 1980. xvi, 254 pp., illus. + appendix. \$49.

The Works of Isambard Kingdom Brunel. An Engineering Appreciation. Alfred Pugsley. Cambridge University Press, New York, 1980. x, 222 pp., illus. \$24.95. Reprint of the 1976 edition.

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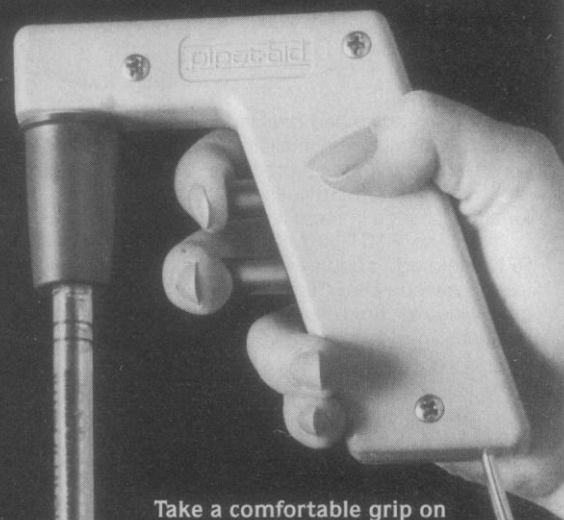
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The University of Michigan Medical School, Department of Internal Medicine, is seeking an **ACADEMIC GASTROENTEROLOGIST**. Faculty position in primary affiliated teaching hospital. Position involves patient care, teaching, and research. Applicant should be Board-certified or Board-eligible in gastroenterology. Send curriculum vitae, first inquiry to: **R. R. Joseph, M.D., Professor, Internal Medicine, Director, Department of Internal Medicine, Wayne County General Hospital, 2345 Merriman Road, Westland, Mich. 48185. A nondiscriminatory, Affirmative Action Employer. Code 280BO.**

The University of Michigan Medical School, Department of Internal Medicine, has a position available in **NUCLEAR MEDICINE**. Physician with primary interest in nuclear medicine is sought for academic position in primary affiliated teaching hospital. Training in internal medicine desirable. Board-certification in nuclear medicine essential. Position entails teaching/patient care/research/interpretation and supervision of nuclear medicine procedures. Send curriculum vitae, first inquiry to: **R. R. Joseph, M.D., Professor and Director, Department of Internal Medicine, Wayne County General Hospital, 2345 Merriman Road, Westland, Mich. 48185. A nondiscriminatory, Affirmative Action Employer. Code 279HO.**

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ASSISTANT PROFESSOR. Tumor immunology or cellular immunology. Applications are sought for a position in the Radiobiology Section of the Department of Therapeutic Radiology. Candidates should have research interests in some fundamental aspect of tumor immunology or cellular immune mechanisms. Address applications to: **William C. Summers, M.D., Ph.D., Radiobiology, Yale School of Medicine, 333 Cedar Street, New Haven, Connecticut 06510. Applications must be received by 1 March 1981. Yale University is an Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR. Renewable term appointment. Applications are invited from specialists in biophysics or biophysical chemistry for a position available September 1981. Applicant should have a strong commitment to research and teaching at both graduate and undergraduate levels. Curriculum vitae, summary of research and teaching aspirations, and three letters of reference should be sent to:

Professor Leslie M. Loew
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Deadline for receipt of completed application: 10 February 1981. *The University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ANATOMIST. The faculty positions at intermediate faculty levels will be available by early summer in the Department of Anatomy, University of Alabama in Birmingham. Persons with research interests in experimental or developmental neuroanatomy or neurocell biology and with teaching interests and experience in neuroanatomy and/or gross anatomy should send a letter stating interests and goals along with curriculum vitae. Postdoctoral experience and evidence of productive, fundable research programs will receive highest priority. Position and salary will be commensurate with education and experience. *The University of Alabama in Birmingham is an Affirmative Action/Equal Opportunity Employer.* Send information to: **Earl G. Hamel, Jr., Ph.D., Department of Anatomy, University of Alabama in Birmingham, University Station, Birmingham, Ala. 35294.**

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ASSISTANT PROFESSOR DEPARTMENT OF BIOLOGY, AND CENTER FOR CANCER RESEARCH Massachusetts Institute of Technology (MIT)

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One position involves teaching an undergraduate course in population biology, the other includes teaching undergraduate course in limnology. Both positions involve development of an advanced course in area of specialization and may include participation in lecture portion of a team-taught introductory biology course. Development of a strong research program and supervision of graduate students are required.

Both tenure-track positions begin 16 August. Salaries for 9 months will be \$18,000 to \$20,000. Applicants must have Ph.D.'s; postdoctoral research and/or teaching experience is desirable.

Before 15 February send curriculum vitae, reprints, transcripts, and have three letters of reference sent separately to either: **POPULATION BIOLOGY SEARCH or AQUATIC ECOLOGY SEARCH, Department of Biology, The University of North Dakota, Grand Forks, N.D. 58202.**

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ASSISTANT PROFESSORS OF BIOLOGY

The Department of Biology, University of South Florida, is anticipating three tenure-track positions at the assistant professor level commencing August 1981. Applicants must have the Ph.D. degree; postdoctoral experience is desirable. They should possess a commitment to research and teaching at the graduate and undergraduate level. The following positions are anticipated:

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- 3) Population Geneticist.

The University of South Florida, Department of Biology, has 33 faculty members and offers eight degrees, including the Ph.D. *The University of South Florida is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.* Candidates should forward the following materials: (i) curriculum vitae; (ii) statement of research objectives; (iii) recent Ph.D.'s should submit graduate transcripts. Candidates should also arrange to have three letters of recommendation forwarded to: **Chairman, Search Committee, Department of Biology, University of South Florida, Tampa, Fla. 33620.** Deadline for applications is 28 February 1981.

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOLOGY

Applications are invited from broadly trained individuals with a completed Ph.D. in botany. Applicant should be able to offer courses in plant morphology, plant anatomy, plant ecology, genetics, and plant systematics. Research interests should be in some aspect of field botany. The position principally involves instruction in general biology and botany courses. Salary is \$15,000 to \$16,000. Position to begin August 1981, pending legislative funding. Send complete résumé, transcripts, and three letters of recommendation to: **Dr. Robert Rychert, Chair, Biology Department, Boise State University, Boise, Idaho 83725.** Applications close 2 March. *An Affirmative Action/Equal Opportunity Employer.*

The Department of Chemistry, University of Notre Dame, invites applications for a tenure-track position at the ASSISTANT PROFESSOR level. All areas of chemistry will be considered, but preference will be given to applicants whose research interests are biologically related and best suited to expanding NMR and other physical facilities. Candidates will be expected to have a strong interest and potential of excellence in both teaching and research. Send résumé, three letters of recommendation, and summary of research plans to: **Dr. R. K. Bretthauer, Department of Chemistry, University of Notre Dame, Notre Dame, Ind. 46556.** *The University of Notre Dame is an Equal Opportunity/Affirmative Action Employer.*

Biology Department, ASSISTANT PROFESSOR/DEVELOPMENTAL BIOLOGIST, doctorate in the biological sciences. A temporary 1-year position open at the assistant professor level. Salary competitive and based on experience. The principal responsibility is to teach developmental biology and introductory biology. Interested candidates reply by 1 March 1981 to: **Dr. David Ostrovsky, Biology Department, Millersville State College, Millersville, Pa. 17551.** *Millersville State College earnestly seeks and is eager to receive applications from women and minority candidates.*

Applications are invited for appointment as ASSISTANT PROFESSOR in the Environmental Engineering Program. Specialization in biological or physical processes in water and wastewater treatment is desired. Duties will include teaching in both graduate and undergraduate courses as well as development of an active program of research and scholarship. Send curriculum vitae and list of three references to: **Dr. J. S. Deviny, Search Committee, University of Southern California, University Park, BHE 213, Los Angeles, Calif. 90007.** *USC is an Equal Opportunity/Affirmative Action Employer.*

The Industrial Environmental Health Sciences Department of the Graduate School of Public Health, University of Pittsburgh, has one position in INDUSTRIAL HYGIENE available immediately. The appointment may be at the assistant or associate professor level, depending upon qualifications. The applicant should have engineering or physical science undergraduate training and an appropriate doctoral degree in industrial hygiene.

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Salary is commensurate with qualifications. Candidate should send curriculum vitae and supporting material to: **Dr. Dwight Underhill, Search Committee, Industrial Environmental Health Sciences, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pa. 15261.**

University of South Carolina, Department of Communicative Disorders, is seeking an ASSISTANT OR ASSOCIATE PROFESSOR OF SPEECH AND HEARING SCIENCE. Tenure-track position requiring Ph.D. with formal training in speech-hearing science. Academic and research experience desirable. Candidate expected to teach graduate courses in speech and hearing science, advise students, develop speech-hearing science laboratory, research. Salary competitive, dependent on qualifications and rank. Application deadline: 15 March 1981 for position beginning 1 June 1981. Send letter of application, résumé, transcripts, and three letters of recommendation to: **James R. Cox, Ph.D., Chairman, Search Committee, Department of Communicative Disorders, University of South Carolina, Columbia, South Carolina 29208.** Position contingent on legislative funding. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR, ENVIRONMENTAL GEOCHEMISTRY. Tenure-track appointment involving teaching and research in aqueous geochemistry and thermodynamics. Excellent opportunities for interdisciplinary collaboration with ecologists, meteorologists, geologists, and hydrologists. Send résumé, reprints, and names of three references to: **George M. Hornberger, Department of Environmental Sciences, Clark Hall, University of Virginia, Charlottesville, Virginia 22903.** Closing date for applications: 1 February 1981.

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ASSISTANT PROFESSOR OF MEDICINE. The CVP Division, Department of Medicine, University of Pennsylvania, has an opening for a clinical investigator in pulmonary medicine with:

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ASSISTANT PROFESSOR, PHYSIOLOGY WEST VIRGINIA UNIVERSITY SCHOOL OF MEDICINE

Tenure-track position available 1 July 1981. Candidate must have postdoctoral research experience and be able to develop strong independent research program. Responsibilities include teaching of graduate, medical, and other health science students, 6 February 1981 is deadline for receipt of all application materials. Send curriculum vitae, brief description of research interests, and three letters of reference to: **Dr. George A. Hedge, Professor and Chairman, Department of Physiology, West Virginia University Medical Center, Morgantown, W. Va. 26506.** *West Virginia University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR, VERTEBRATE MORPHOLOGY. Tenure-track position available for August 1981. Ph.D. required. Postdoctoral experience preferred. Responsibilities include participation in teaching upper-level histology and human anatomy and physiology, and development of an active research program in experimental histology or embryology. Send curriculum vitae and names of three possible references by 15 February 1981 to: **Michael A. Poirrier, Chairman, Department of Biological Sciences, University of New Orleans, New Orleans, Louisiana 70122.** (A member of the Louisiana State University System.) *Equal Opportunity/Affirmative Action Employer.*

The Colorado College is seeking a BOTANIST for a 1-year appointment (sabbatical leave replacement) for the 1981-1982 academic year. Ph.D. required. Applicants should be able to teach introductory botany courses, field botany, and plant morphology. Send curriculum vitae, copies of transcripts, and arrange to have three letters of reference sent by 1 March 1981 to: **Ronald P. Hathaway, Chairman, Department of Biology, The Colorado College, Colorado Springs, Colorado 80903.**

An Equal Opportunity Employer with an Affirmative Action Program.

SEARCH FOR CHAIRPERSON DEPARTMENT OF PHYSICS UNIVERSITY OF DELAWARE

The University is a small (12,000 undergraduates and 3,000 graduate students), state-supported institution located in a town on the Eastern Seaboard close to Philadelphia, Washington, and New York. The department (18 faculty) is an expanding unit working in close cooperation with Bartol Research Foundation of the Franklin Institute (13 members), with which it shares laboratories, shops, offices, and classrooms on the campus. The appointment will begin 1 September 1981; 1 February 1981 is the terminal date for completion of applications. Please send letters of inquiry, nomination, or application to:

**Professor Richard J. Libera
Department of Mathematical Sciences
University of Delaware
Newark, Delaware 19711**

The University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

Ph.D.—BIOCHEMIST OR PHYSIOLOGIST

Los Angeles-based endocrinology laboratory has opening for Ph.D.—biochemist or physiologist to serve as Peptide Hormone Section Chief. Candidates must have fundamental knowledge of peptide hormone physiology and basic experience in development and use of peptide RIA methods. Capabilities must extend beyond evaluation of commercial kits. Candidates must also have good organizational skills and supervisory experience. Excellent salary and benefits. Opportunity to participate in R & D and company management. Send résumé and salary requirements to:

Endocrine Sciences
18418 Oxnard Street
Tarzana, California 91356
Telephone: 213-345-6503

MEHARRY MEDICAL COLLEGE BIOCHEMISTRY FACULTY POSITIONS

We are seeking applicants for tenure-track positions at the ASSISTANT AND/OR ASSOCIATE PROFESSOR LEVELS. The anticipated starting date is 1 July 1981. Applicants must have a Ph.D. or M.D. degree and postdoctoral training. We are primarily interested in individuals with research interest in regulation of metabolism, cell surface recognition phenomena and/or chemical enzymology, although excellent candidates in other areas of biochemistry will be considered. Candidates must have a firm commitment to graduate medical education and successful applicants will be expected to maintain a research program of high quality as well as to teach in the graduate and medical biochemistry programs. Applications including curriculum vitae, representative publications, a concise statement of research interests and/or proposed research, and the names of three references should be sent to: Dr. Ifeanyi J. Arinze, Chairman of the Search Committee, Department of Biochemistry, School of Medicine, Meharry Medical College, Nashville, Tennessee 37208.

BIOBEHAVIORAL SCIENCES. Associate or full professor. Salary negotiable. To develop a graduate research and teaching program in endocrinology in relation to brain and behavior, including the training of predoctoral students, and possible collaborative research with other faculty. While comparative studies are appropriate, emphasis is on the mammalian brain. A doctorate in the relevant area, and postdoctoral research and teaching experience. Reply by 1 March 1981 to: Dr. Benson E. Ginsburg, U-154, University of Connecticut, Storrs, Conn. 06268.

Equal Opportunity Employer

NATIONAL SCIENCE FOUNDATION DIVISION OF OCEAN SCIENCES BIOLOGICAL OCEANOGRAPHER

National Science Foundation (NSF), Division of Ocean Sciences, is seeking qualified applicants for a 1- to 2-year rotational or permanent appointment as **PROGRAM DIRECTOR FOR THE BIOLOGICAL OCEANOGRAPHY PROGRAM**. This position has a salary range of \$37,871 to \$50,112.50 per annum. The program provides support for scientists primarily from academic institutions to pursue fundamental research in biological oceanography. The selected candidate will carry out program planning, proposal evaluation, administration of research grants, and liaison with other federal agencies. Applicants should have a Ph.D. in biological oceanography or a related biological science, or the equivalent in experience, plus at least 3 years of specialized experience in biological oceanography. Field experience in an academic institutional program is highly desirable. Applicants should send letters of interest and SF-171 or current résumé by 31 January 1981 to: National Science Foundation, Division of Personnel and Management, Personnel Administration Branch, 1800 G Street, NW, Washington, D.C. 20550; attention: E. Paul Broglie, Announcement Number EX-81-1. For further information, telephone: 202-357-7841. NSF is an Equal Opportunity Employer.

CYTOGENETICIST, PH.D.

A tenure-track position will be available beginning April 1981. Responsibilities include directorship of the Cytogenetics Laboratory, research, and teaching in the field of medical genetics. Rank and salary depends on experience. Please submit curriculum vitae, a statement of research and teaching experience, transcripts, and three letters of recommendation to: Dr. Ian Burr, Acting Director of Genetics, Department of Pediatrics, Vanderbilt Medical Center, Nashville, Tenn. 37232. *Equal Opportunity Employer.*

POSITIONS OPEN

BIOLOGIST—Vertebrate-zoology-physiology. This position is tenure-track and requires the Ph.D. degree. Salary is competitive and based on credentials and experience. St. Andrews Presbyterian College is a 4-year, church-related, coeducational college currently enrolling 750 students. The College expects its faculty to have a strong commitment to teaching undergraduates in strong major programs and to participation in its interdisciplinary core curriculum. Please send résumé and three references by 31 January 1981 to: Dr. Ronald C. Crossley, Dean of the College, St. Andrews Presbyterian College, Laurinburg, North Carolina 28352. Telephone: 919-276-3652. *An Equal Opportunity/Affirmative Action Employer and College.*

BIOLOGY

Applications are invited for two openings in biology at Emporia State University:

- 1) A field-oriented **PLANT SCIENTIST** highly qualified in the general areas of ecology, physiology, and soil-plant associations. The successful candidate will be expected to develop a course concerned with ecological and physiological interactions between soils and plants and to supervise graduate and undergraduate research in plant ecology and related subjects.
- 2) A broadly based **GENETICIST** to teach a general genetics course and develop a research program in genetics. The successful candidate may develop an advanced genetics course but will also be expected to teach one or more of the following: electron microscopy, histology, parasitology, and developmental biology.

Successful candidates must have the Ph.D. and be prepared to teach in areas other than their area of expertise, including introductory level courses.

Appointments will be made at various ranks and under various tenure or temporary conditions depending upon the qualifications of the successful candidates. The effective employment date is 18 August 1981.

Formal application includes a cover letter on a curriculum vitae and three letters of reference sent directly to: Dr. John Ransom, Division of Biological Sciences, Emporia State University, Emporia, Kans. 66801. Closing date for applications is 15 February 1981.

CHAIRPERSON—DEPARTMENT OF BIOLOGICAL SCIENCES

Biologist with a record of scholarly achievement and excellence in teaching. Minimum qualifications: Ph.D., 5 years of college teaching experience. Ability to interact effectively with 23 faculty who have research interests and teaching duties in diverse fields of biology. Some experience in obtaining and administering extramural grants desirable, strong commitment to graduate and undergraduate education in biology. Limited teaching duties, involvement in the renovation and development of new science facilities. B.S. offered in botany, zoology, and biological sciences, M.S. in biological sciences. Salary and rank commensurate with qualifications and experience. Appointment effective 1 July 1981. Application deadline: 4 February 1981. Send letter of application, curriculum vitae, and three or more current reference letters to: Dr. James E. Joy, Chairman, Selection Committee, c/o College of Science, Marshall University, Huntington, W.Va. 25701. *An Equal Opportunity/Affirmative Action Employer.*

The Deep Sea Drilling Project, Scripps Institution of Oceanography, University of California, San Diego, is currently seeking to fill position for qualified **EARTH SCIENTIST** as section manager of an ongoing scientific program. Appointment as associate chief scientist for science services will be in the academic administrator series, salary commensurate with experience. Ph.D. in earth sciences required. Demonstrated ability in research and research planning required. Experience in research management desirable. Emphasis of position will be in information management as service to scientific community, maximizing the use of a largely computerized established and growing data base, publication series, and core collection. Direct management of approximately 30 employees in data processing and retrieval, reports production, and curatorial activities. Please send complete résumé and names of at least five references to: Dr. M. N. A. Peterson, Deep Sea Drilling Project, Mail Code A-031, University of California, San Diego, La Jolla, California 92098.

The University of California is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

CHAIRPERSON—PHARMACOLOGY. A search has just begun to find a chairperson for the Department of Pharmacology, University of Missouri-Columbia, School of Medicine, Columbia campus. The department has a good number of active investigators and newly renovated laboratories. We are looking for someone with an active research program, administrative abilities, and a commitment to maintain quality courses in pharmacology. Please send curriculum vitae to: Dr. Allen W. Jones, Chairman, Pharmacology Search Committee, Department of Physiology, M412 Medical Science Building, University of Missouri-Columbia, Columbia, Missouri 65211, by 31 March 1981. *An Equal Opportunity/Affirmative Action Employer.*

University of California, Los Angeles (UCLA), Neuropsychiatric Institute, seeks **CHIEF NEUROPSYCHOLOGIST** to develop and direct major new training program in neuropsychology. **Qualifications:** clinical and research experience with neurological, neurosurgical, and psychiatric patients, both adults and children, including mental retardation, learning disabilities, and substance abuse; substantial experience in training neuropsychologists; and academic achievements, including publications, sufficient to qualify for senior faculty appointment. **Contact:** Peter Tanguary, M.D., Chairman, Neuropsychology Search Committee, 760 Westwood Plaza, Los Angeles, Calif. 90024. *Equal Opportunity/Affirmative Action Employer.*

DEAN—SCIENCE, MATHEMATICS AND ENGINEERING

The University of Nevada, Las Vegas, seeks applicants for the position of Dean of the College of Science, Mathematics and Engineering (CSME). The University is a youthful and growing institution with 400 faculty members, overall enrollment approaching 10,000, and a full-time enrollment of 6500. The college has 54 faculty and 15 adjunct faculty in its departments of Biology, Chemistry, Engineering, Geoscience, Mathematics, and Physics. Current full-time enrollment exceeds 1000 and growth rate averages 3.2 percent annually. External funding is presently \$834,000. Master's programs exist in biology, mathematics, and physics and are being developed in geology, computer science, and water resources management. The University's location offers a unique climate for development of arid land studies.

In a time of tightening budgets and growing demands, the college seeks to develop its research programs, educate a nontraditional student body, and provide community service. Its dean should be a strong and thoughtful leader, a skilled and experienced administrator, and a scholar with a proven record in teaching and research. This tenure-track position is associated with a full professorship in one of the departments.

Interested persons should send a letter of application, a complete résumé, and names and addresses of four references to: Search Committee for Dean, CSME, Office of the Academic Vice-President, University of Nevada, Las Vegas, Las Vegas, Nevada 89154. For more information, telephone: 702-739-3301. Deadline for receipt of application is 31 January 1981. *Equal Opportunity/Affirmative Action Employer.*

McGill UNIVERSITY. Division of Reproductive Biology, Department of Obstetrics and Gynecology, has an immediate opening for a **DEVELOPMENTAL BIOLOGIST/REPRODUCTIVE BIOLOGIST** at assistant professor level. Candidates must have Ph.D., or M.D. degree followed by 2 to 4 years of relevant postgraduate training; they are expected to establish their own research group and to compete for independent outside grant support. Closing date for applications is 15 March 1981. Send curriculum vitae and three letters of reference to: Dr. K. B. Ruf, Division of Reproductive Biology, Royal Victoria Hospital, 687 Pine Avenue West, Montreal, Quebec, Canada H3A 1A1.

POSTDOCTORAL FELLOW, reproductive biology, McGill University. Candidates having a Ph.D. or equivalent are invited to apply for a postdoctoral fellowship in reproductive biology at McGill University. An interest in male reproduction and research training either in cell culture or in animal physiology is desirable. Closing date for applications is 15 March 1981. Send curriculum vitae and three letters of recommendation to: Dr. B. Robaire, Division of Reproductive Biology, Department of Obstetrics and Gynecology, Royal Victoria Hospital, 687 Pine Avenue West, Montreal, Quebec, Canada H3A 1A1.

POSITIONS OPEN

DEAN COLLEGE OF PUBLIC HEALTH UNIVERSITY OF OKLAHOMA

The University has reorganized its programs in public health to create a separate College of Public Health. Applications are invited for the position of dean. The College is located on the Oklahoma City Campus of the University of Oklahoma and is one of eight colleges comprising the Health Sciences Center. Applicants should submit current curriculum vitae before 31 March 1981 to:

Dean's Search Committee
Office of the Provost
University of Oklahoma Health Sciences Center
P.O. Box 26901
Oklahoma City, Oklahoma 73190

An Equal Opportunity/Affirmative Action Employer

DIRECTOR OF RESEARCH—The University of Texas at El Paso. Primary responsibility will be to coordinate the development and administration of sponsored research. Responsibilities will include assistance in developing proposals and contracts with granting agencies of foundations, the dissemination of research opportunity information, the maintenance of a library of key documents, and the verification of compatibility of interdisciplinary research activities. The candidate should have a record of successful research, and the ability to write and critique proposals. Preference will be given to candidates with experience in grants administration at a university and/or funding agency. *The University of Texas at El Paso is an Equal Opportunity/Affirmative Action Employer.* Send nominations or application with supporting curriculum vitae and a list of references to: Professor William C. Herndon, Chairperson, Search Committee for Director of Research, The University of Texas at El Paso, El Paso, Texas 79968. The deadline is 1 March 1981.

DIRECTOR, ENVIRONMENTAL HEALTH PROGRAM—School of Public Health, University of Minnesota, to begin 1 July 1981. **Responsibilities:** Administer and coordinate teaching, research, and community service activities, initiate and participate in independent research program and graduate level courses, advise master's and Ph.D. students, and represent program to university, community, policy-making bodies and funding agencies. **Qualifications:** Doctoral degree in appropriate discipline, 10 years of professional experience with strong research background in environmental health. **Level:** Full professor, tenured. **Salary negotiable.** **Application deadline:** 1 March 1981. Applicants should submit detailed résumé and list of individuals from whom letters of reference may be obtained to: John E. Kralewski, Ph.D., School of Public Health, University of Minnesota, 420 Delaware Street, SE, Box 197, Minneapolis, Minn. 55455. *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

The Department of Commerce, NOAA, NMFS, SEFC, an *Equal Opportunity Employer*, is seeking applicants for an **ECOLOGIST** position available through Title IV of the Intergovernmental Personnel Act of 1970. Under this act the federal government pays salaries, benefits, and travel expenses (amount allowed by federal status regulations) for professional personnel "loaned" to the government by an academic institution or state agency. The 2- to 4-year assignment for the ecologist position will be in the shrimp and bottomfish program. This position will be part of an ecological team at the NMFS Southeast Fisheries Center's Galveston Laboratory. The team has responsibility for conducting multidisciplinary environmental research projects relating to the shrimp and bottomfish fisheries in the Gulf of Mexico. Interested individuals, institutions, or state agencies should contact: Dr. Edward F. Klima, Director, NMFS, SEFC, Galveston Laboratory, 4700 Avenue U, Galveston, Texas 77550; telephone: 713-763-1211, extension 501. Closing date for receipt of applications, résumés, and three letters of evaluation is 15 February 1981.

ELECTRON MICROSCOPIST, Ph.D., with diagnostic or research experience in anatomy or pathology, technically expert in electron microscopy, wanted for private medical school affiliated hospital. Primary duty in diagnostic surgical pathology and cytology, with opportunity for teaching and clinical research. Salary open, excellent benefits. Submit inquiries with curriculum vitae to: W. H. Kern, M.D., Director, Department of Pathology, Hospital of the Good Samaritan, 616 South Witmer Street, Los Angeles, Calif. 90017.

POSITIONS OPEN

ENERGY SCIENTIST. Position available February 1981 to manage an energy conservation project and to plan and develop renewable energy projects. Requirements: M.S. in a physical science and 2 to 3 years of experience in one or more of the following areas as they apply to urban, suburban, and rural housing: energy conservation, small scale renewable energy systems, appropriate technologies, energy policy issues, and community energy planning. Salary: mid-teens. Send résumé and three letters of recommendation to: Dr. John H. Fitch, Director, Scientific Staff, Massachusetts Audubon Society, Lincoln, Mass. 01773.

EXECUTIVE VICE-PRESIDENT. The American Board of Medical Specialties is seeking a chief executive officer to replace retiring incumbent. Applicant should be a mature Board-certified physician with a proven record of accomplishment in medical education and administration.

The American Board of Medical Specialties serves and coordinates the activities of its 23-member certifying boards and represents them in a variety of national committees and organizations.

Address applications, nominations, and inquiries to:

Bruce E. Spivey, M.D., President
American Board of Medical Specialties
1603 Orrington Avenue, Suite 1160
Evanston, Illinois 60201

FACULTY APPOINTMENTS IMMUNOLOGY/IMMUNOCHEMISTRY/ VIROLOGY PERSISTENT VIRAL INFECTION UNIVERSITY OF BRITISH COLUMBIA

The Division of Immunology of the Department of Pathology, University of British Columbia, wishes to recruit two investigators at the assistant professor level to join a small group of investigators examining the role played by perinatal acquisition of viral infection in the development of long-term viral persistence and delayed-onset disease manifestations. Applicants should hold a Ph.D. or M.D. degree and have postdoctoral experience or demonstrated research productivity in immunologic and/or virologic aspects of persistent viral infection with particular emphasis on the role of immunologic mechanisms in the induction and maintenance of viral persistence, the immunologic consequences of viral persistence in lymphocyte subpopulations, or the application of monoclonal antibody technology to characterization of viral persistence.

Successful applicants will be required to seek support for an initial 5-year period under the auspices of the Medical Research Council of Canada Subject Development Program in Perinatology under the sponsorship of the University of British Columbia. At the end of the 5-year appointment, candidates would be competitive for tenure-track academic appointments within the Department of Pathology.

Please send curriculum vitae and names of three references by 23 January 1981 to:

Dr. David Hardwick
Chairman, Department of Pathology
University of British Columbia
Vancouver, British Columbia, Canada V6T 1W5

GENETIC COUNSELOR: A new, full-service Medical Genetics Program will require a genetic counselor, at the clinical instructor level. This person will have both primary patient contact and administrative responsibilities. The position requires a master's degree from a recognized training program in genetic counseling. Send résumé and three references to: Kathleen W. Rao, Ph.D., Department of Pediatrics, 127 Irons Building, East Carolina University, Greenville, N.C. 27834. *An Equal Opportunity/Affirmative Action Employer.*

HUMAN CYTOGENETIC TECHNICIAN: Shodair Regional Genetics Program seeks a **TECHNICIAN** for its Cytogenetics Laboratory. Primary responsibility will include karyotyping (standard and banded) from whole blood, amniocentesis, and skin fibroblast culture as well as routine maintenance of chemicals and equipment under the supervision of the laboratory director. Preference will be given to individuals with experience. Appointment begins 1 March 1981 or earlier if feasible. Salary: \$14,500 to \$16,000, depending on experience. Closing date for application is 15 February 1981. Forward résumé, three letters of reference (to be sent directly) and official transcripts to: Dr. Daniel L. Yazak, Assistant Administrator, Shodair Children's Hospital, P.O. Box 5539, Helena, Montana 59604. *Shodair Hospital is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITION: CELL BIOLOGIST

The Cornelius Vanderbilt Whitney Laboratory for Experimental Marine Biology and Medicine, a rapidly growing, well-equipped quantitative biology research center of the University of Florida, invites applications from qualified individuals for a tenure-earning, full-time (12-month) research professorship at the assistant or associate level. We desire a person with a strong background in quantitative biology with emphasis in immunology, membrane biochemistry, or receptor biology who is interested in the basic mechanisms underlying cell-cell interaction. We would prefer to appoint a candidate whose research utilizes marine organisms or could apply their current research expertise to marine systems.

Please submit curriculum vitae, names and addresses of three references, and a statement of research and teaching interests by 1 March 1981 to: Dr. Vernon C. Maino, Chairman, Search Committee, C.V.W. Laboratory, University of Florida, Route 1, Box 121, St. Augustine, Florida 32084. *University of Florida is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS, MEDICAL SCHOOL. Applicants are invited for tenure-track appointments at the assistant or associate professor levels in the expanding Department of Microbiology, the School of Medicine, Texas Tech University Health Sciences Center. Rank and salary will be dependent on training and experience. Candidates are expected to have a Ph.D. degree or equivalent, with postdoctoral training or experience in pathogenic microbiology. Appointees will participate in teaching medical and graduate students and will be expected to develop an independent research program. The setting provides an opportunity to work in new, well-equipped laboratories and to collaborate with other investigators interested in pathogenesis. Send résumé and names and addresses of three references to: Dr. John M. McKenna, Chairman, Search Committee, Department of Microbiology, School of Medicine, TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER, Lubbock, Texas 79430. *Texas Tech University is an Affirmative Action/Equal Opportunity Employer.*

GENETICIST/PLANT BREEDER

The Department of Botany and Plant Sciences, University of California, Riverside, announces a position at the assistant professor level, with both an Experiment Station and an academic title, available 1 July 1981. The position is a tenure-track, 11-month appointment in the College of Natural and Agricultural Sciences and in the Agricultural Experiment Station. A Ph.D. is required; postdoctoral experience is preferred, but all qualified candidates will be considered. A quantitative background is desirable, with emphasis in the genetics of tree, agricultural, or horticultural crops preferred, but candidates with other backgrounds are encouraged to apply. The appointee must assume responsibility for an on-going breeding program in citrus, with emphasis in developing rootstocks. A secondary program in the breeding and genetics of an annual crop is desirable. Opportunities exist for interaction with research workers in pathology, virology, entomology, nematology, plant physiology, biochemistry, soil and environmental sciences, and statistics. The appointee is expected to teach advanced courses in genetics and plant breeding. Must be willing to serve as major professor to M.S. and Ph.D. students.

Send curriculum vitae and official transcripts, and arrange to have at least three letters of recommendation sent to: Dr. Giles Waines, Search Committee Chairman, Department of Botany and Plant Sciences, University of California, Riverside, California 92521. Application deadline is 16 February 1981, or later if a suitable applicant has not been selected.

An Affirmative Action/Equal Opportunity Employer

LABORATORY MICROBIOLOGY FELLOW

The University of California, Irvine, Department of Pathology, is recruiting a 1- to 2-year laboratory microbiology fellowship position at the clinical instructor level beginning 1 July 1981. Required: M.D., Board-eligible in anatomic and/or clinical pathology. Position consists of 50 percent clinical laboratory work and 50 percent research. Postresidency training in diagnostic bacteriology, mycology, serology, parasitology, and virology. Research in the areas of molecular pathology and viral oncology is available for interested candidates. *An Affirmative Action employer.* Send curriculum vitae and three references to: Luis M. de la Maza, M.D., Ph.D., Director, Division of Microbiology, University of California Medical Center, Orange, Calif. 92668, by 16 February 1981.

POSITIONS OPEN

GENETICIST DEPARTMENT OF BIOLOGY UCLA

Applications are invited for a tenure-track, ASSISTANT PROFESSOR position in the area of genetics. The new faculty member will join the Division of Cell, Molecular, and Developmental Biology within our department. While the specific research specialty is open, the candidate is expected to carry out a vigorous research program and contribute to our undergraduate and graduate teaching programs. Applicants should send curriculum vitae, a summary of research objectives, and the names of three references to:

Chairman
Search Committee for Genetics
University of California
Los Angeles, California 90024

The deadline for receiving applications is 1 February 1981.

The University of California is an Equal Opportunity/Affirmative Action Employer.

GENETICS/POPULATION BIOLOGY. One-year replacement, 1981-1982 academic year. Instructor/assistant professor to teach and/or assist in introductory genetics and population biology courses plus an offering in your specialty. Application deadline: 23 February 1981. R. M. Chute, Search Committee, Department of Biology, Bates College, Lewiston, Maine 04240. Bates is an Equal Opportunity Employer.

IMMUNOBIOLOGIST with postdoctoral experience and expertise in hybridoma technology. For exciting new immunotherapeutic project at Baylor College of Medicine, Houston, Texas. Please send curriculum vitae and bibliography to:

Box 306, SCIENCE

IMMUNOLOGIST

Assistant Professor

New Mexico Institute of Mining and Technology anticipates the availability for fall 1981 of a tenure-track assistant professorship in biological science. A Ph.D. in immunology or related field plus 1 to 2 years of postdoctoral training is required. The successful candidate will be expected to establish an independent research program and teach undergraduate and graduate courses in immunology. Preference will be given to a candidate with interest in histology or embryology. The applicant will participate in a program for premedical profession student training and may wish to interact with an established biomedical research program at New Mexico Tech. Please submit résumé, names and addresses of three references, and a statement of research and teaching interests within one month after the publication of this notice. Reply to: James A. Brierley, Chairman, Department of Biology, New Mexico Tech, Socorro, New Mexico 87801. Affirmative Action/Equal Opportunity Employer.

Wanted: JUNIOR LEVEL Ph.D. with experience in tissue culture and/or hormone receptor assay, to work in well-equipped cancer research laboratory in Long Island (N.Y.) teaching hospital with academic affiliation (State University of New York-Stony Brook). Please send curriculum vitae and three references to: Larry Nathanson, M.D., Director, Oncology-Hematology Division, Nassau Hospital, Mineola, Long Island, New York 11501. Telephone: 516-663-2336.

MEDICAL PHYSIOLOGIST

Applications are invited from individuals with demonstrated teaching and research experience in medical physiology with an emphasis in cardiovascular physiology. Teaching, curriculum planning, and research opportunities are available in a state-supported osteopathic medical college. Preference will be given to applicants with experience in the organ systems, discipline integrated approach to medical education. A Ph.D. in physiology is required. Rank and salary for this tenure-track position is negotiable. The application deadline is 1 March 1981. Forward curriculum vitae and a list of three references to: Daniel E. Overack, Ph.D., Search Committee Chairman, Department of Interdisciplinary Sciences, The Oklahoma College of Osteopathic Medicine and Surgery, P.O. Box 2280, Tulsa, Oklahoma 74101. An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

INVERTEBRATE ZOOLOGIST/CHAIRPERSON.

Applications are invited from individuals with an earned doctorate, a demonstrated research record in invertebrate zoology, and excellence in teaching. Duties include teaching invertebrate zoology and chairing the department. The department of eight full-time faculty has a strong research emphasis in environmental biology. Send letter of application, curriculum vitae, transcripts, and letters of recommendation to: Dr. John J. Peterka, Department of Zoology, North Dakota State University, Fargo, N.D. 58105. Completed applications must be received by 15 February 1981. The position is available 1 July 1981. An Equal Opportunity Institution.

MICROBIAL GENETICIST/ MOLECULAR BIOLOGIST

The Department of Microbiology, University of Notre Dame, has a tenure-track opening at the assistant or associate professor level beginning 1 September 1981 in the area of microbial genetics and molecular biology. The successful candidate will be expected to develop a strong research program in microbial molecular genetics which utilizes recombinant DNA technology and in so doing, be capable of training Ph.D. candidates in this area. Formal teaching duties include an upper level course in microbial genetics and one in molecular biology. Postdoctoral experience is preferred. Send curriculum vitae, a description of future plans, official transcripts, and names of three references by 1 March 1981 to: Dr. Morris Pollard, Department of Microbiology, University of Notre Dame, Notre Dame, Indiana 46556.

This University is an Equal Opportunity/Affirmative Action Employer.

MICROBIOLOGY

A tenure-track position at the assistant professor level is anticipated for 1981-1982. Principal teaching responsibilities will be in microbiology. Additional duties include general biology and other courses consistent with the individual's expertise. Research in the primary discipline is required. Send three letters of reference, undergraduate and graduate transcripts, curriculum vitae, and a statement of research interests to: G. L. Bintz, Department of Biology, Eastern Montana College, Billings, Montana 59101. Application deadline is 15 February 1981. The position is subject to legislative funding. Eastern Montana College is an Equal Opportunity Employer.

NEUROBIOLOGY AND PHYSIOLOGY. In the process of reorganizing its life science efforts, Northwestern University has created a new Department of Neurobiology and Physiology on its Evanston Campus. Several tenure-track positions should become available during the next 12 months. We are looking for outstanding individuals whose research interests in neurobiology complement the department's present strength in sensory physiology and reproductive neuroendocrinology. Applications are invited from individuals whose research interests are in one of the following areas: (i) development and plasticity in neural connectivity; (ii) ultrastructural-functional relationships; (iii) receptor biochemistry; and (iv) cellular neuroendocrinology. Submit curriculum vitae, short summary description of research interests, and names of three references to: Christina Enroth-Cugell, M.D., Northwestern University Technological Institute, Room 3786, 2145 Sheridan Road, Evanston, Ill. 60201. Deadline for receipt of application is 6 February 1981.

Northwestern University is an Equal Opportunity/Affirmative Action Employer.

TWO POSITIONS: PHYSIOLOGY and ENDOCRINOLOGY. The Department of Zoology, Iowa State University, wishes to strengthen the areas of endocrinology and systems physiology. Applicants will be expected to develop a research program in an area of special interest (for example, environmental, organismic, cellular, molecular, immunological) and teach at the graduate and undergraduate levels. Applicants should have the Ph.D., postdoctoral experience, and strong prospects for funding of the research program. Appointments will be at the ASSISTANT PROFESSOR level (tenure-track). Starting salary: \$19,000 minimum, depending upon qualifications. Send curriculum vitae, three letters of recommendation, and description of research interests by 15 February to: Chairman, Search Committee, Zoology Department, Iowa State University, Ames, Iowa 50011. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

NEUROLOGIST AND CLINICAL NEUROPHYSIOLOGIST, assistant professor. Major effort in EMG; must have experience in clinical neurophysiology, research, and teaching.

Affirmative Action/Equal Opportunity Employer. Interested candidates should send curriculum vitae, reprints, a brief description of research interests, and the names of three possible references to:

Eli S. Goldensohn, M.D.
Coordinator COAP (Neurology)
College of Physicians and Surgeons
Neurological Institute
710 West 168 Street
New York, N.Y. 10032

PLANT PHYSIOLOGIST

The Department of Botany and Plant Sciences, University of California, Riverside, announces a position at the assistant professor-level, with both an Experiment Station and academic title, available 1 July 1981. The position is a tenure-track, 11-month appointment in the College of Natural and Agricultural Sciences and the Agricultural Experiment Station. A Ph.D. is required; postdoctoral experience is preferred, but all qualified candidates will be considered. The appointee must develop a research program in weed science regarding the physiology of weeds or herbicide action as related to weed-crop interactions in annual crops. Candidates with strong plant physiology or biochemical training will be given preference. The appointee is expected to teach upper division and graduate level courses and serve as major professor to M.S. and Ph.D. students. Opportunity exists for participation in interdepartmental pest management program.

Send curriculum vitae and official transcripts and arrange to have at least three confidential letters of recommendation sent to: Dr. L. S. Jordan, Search Committee Chairman, Department of Botany and Plant Sciences, University of California, Riverside, Calif. 92521. Application deadline is 16 February 1981, or later if a suitable applicant has not been selected.

An Affirmative Action/Equal Opportunity Employer

FACULTY POSITIONS COLLEGE OF MEDICINE UNIVERSITY OF KENTUCKY

The University of Kentucky, College of Medicine, invites applications for faculty positions in basic science and clinical departments. The University of Kentucky recognizes a specific responsibility to ensure that the search does not overlook qualified candidates who are women or members of ethnic minority groups. Salary is negotiable based on qualifications and experience. The following disciplines are encouraged to submit applications:

BASIC SCIENCE DISCIPLINES

Anatomy—One faculty position at the assistant professor level with 2 years of postdoctoral training and an active research program in the areas of neuroendocrinology and neuroanatomy.

One research assistant professorship joint with the Tobacco and Health Research Institute with expertise in respiratory tract morphology and morphometry (L/M & E/M).

Medical Microbiology and Immunology—Openings at the assistant professor level; experience teaching medical students; postdoctoral experience and research interests areas of microbial genetics, pathogenic mechanisms, infectious diseases.

Physiology and Biophysics—Two faculty positions, one at assistant professor level and one at rank dependent on education and experience; with strong teaching commitment and research interest in cell physiology, neuroendocrinology, and receptors.

Submit curriculum vitae to:

Karen Jenkins
Special Assistant to the Dean
College of Medicine
University of Kentucky
800 Rose Street
Lexington, Kentucky 40536

The University of Kentucky is an Equal Opportunity Employer.

POSITIONS OPEN

POSITIONS OPEN

POSITIONS OPEN

Molecular Geneticists

Leading pharmaceutical company has several challenging positions available for Ph.D. or M.S. level scientists in its Molecular Biology Department. Candidates should have proven experience and demonstrated proficiency in recombinant DNA methodologies and a strong background in prokaryotic molecular genetics.

We offer excellent salaries and comprehensive benefits which include relocation and PROFIT SHARING.

Résumés should be sent to: **Manager of Personnel Administration, Schering-Plough Research Center, 60 Orange Street, Bloomfield, New Jersey 07003.**



NEUROBIOLOGIST— ASSISTANT PROFESSOR LEVEL

M.D. or Ph.D. with strong background in immunology, genetics, and molecular biology with at least 2 years of postdoctoral experience in neurobiology. Must be sufficiently familiar with morphology and physiology of the mammalian CNS to be able to produce monoclonal antibodies for developmental and functional studies of the visual system.

Starting salary range: at least \$22,000 per annum. Send curriculum vitae and references to: **Dr. Torsten Wiesel, Department of Neurobiology, Harvard Medical School, 25 Shattuck Street, Boston, Mass. 02115.**

PHYSIOLOGIST

Applications are invited for an anticipated tenure-track physiologist position at the assistant professor level, effective 1 September 1981. Applicants should have postdoctoral experience and a strong background in both the molecular and medical aspects of animal physiology. Expertise in neurophysiology is desirable. Responsibilities will include teaching undergraduate and graduate courses in human physiology and in area of specialization. The candidate will be expected to develop a strong and independent research program. Salary will be competitive and commensurate with qualifications. Applications, including curriculum vitae, reprints, a statement of research plans, and names of three references, should be sent to: **Chairman, Biology Department, Georgia State University, University Plaza, Atlanta, Georgia 30303.** Deadline for receipt of applications is 1 March 1981. *Georgia State University is an Equal Educational Opportunity/Affirmative Action Employer in compliance with Title IX and other Civil Rights laws.*

Research associate. A **POSTDOCTORAL POSITION** is open for experimental and/or theoretical work on the conformation of nucleic acids. Please send curriculum vitae and three letters of recommendation to: **W. Curtis Johnson, Department of Biochemistry and Biophysics, Oregon State University, Corvallis, Oregon 97331.** *Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.*

POSTDOCTORAL POSITION to study mitochondrial biogenesis and nuclear mitochondrial interactions in *Neurospora crassa*. Specific areas of interest: RNA splicing, mitochondrial ribosome assembly, and mitochondrial DNA structure. Salary: \$13,380 and up, commensurate with experience. Available 1 July 1981. Send curriculum vitae and two letters of recommendation to:

Dr. A. M. Labmowitz
Department of Biochemistry
St. Louis University Medical Center
1402 South Grand
St. Louis, Missouri 63104

An Equal Opportunity/Affirmative Action Employer, M/F/H.

DEPARTMENT OF PATHOLOGY, University of Arizona, College of Medicine. Applications are solicited for a faculty position at the Veterans Administration Medical Center, Tucson, Arizona, in the following area: assistant professor, clinical pathology; with major commitment to service, research, and teaching in microbiology and clinical chemistry. Active research programs are desirable; minimum requirements are Board-eligibility or certification in clinical pathology (or AP/CP) and 1 or 2 years of prior teaching experience. The position entails some supervisory activity and substantial commitment to medical student and house officer teaching. Applicants should send curriculum vitae to: **Jack M. Layton, M.D., Head, Department of Pathology, University of Arizona College of Medicine, Tucson, Arizona 85724.** *The University of Arizona is an Equal Opportunity/Affirmative Action Employer.*

The **DEPARTMENT OF PHARMACOLOGY** of Case Western Reserve School of Medicine invites applications for a faculty position. Candidates should have the M.D. or Ph.D. degree, postdoctoral research experience, and a record of productivity in original research. Salary and rank are negotiable and dependent on qualifications. The department's research interests are multidisciplinary. We invite applications from scientists of all fields whose research expertise involves the molecular aspects of the action of drugs, hormones, or other chemical agents. The successful candidate will be expected to participate in graduate and medical school teaching and to maintain an excellent research program. Applicants should submit curriculum vitae, names of three references, and a short description of their research interests to: **T. L. Rosenberry, Department of Pharmacology, Case Western Reserve University, 2119 Abington Road, Cleveland, Ohio 44106.** *Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWS IN COGNITIVE SCIENCE AT THE UNIVERSITY OF CALIFORNIA, IRVINE

The Program in Cognitive Sciences at the University of California at Irvine has a number of openings for postdoctoral fellows for the academic years beginning fall 1981 and fall 1982, supported by a Sloan Foundation grant. Individuals with an interest in study and research in the following and related areas are invited to apply: learnability theory, linguistic theory, psycholinguistics, neurolinguistics, cognitive neuroscience, perception, and mathematical cognitive science.

Applications from senior scholars are welcome. Please send a letter outlining research interests, curriculum vitae and names of three or more references to:

Postdoctoral Cognitive Science Committee
c/o Lykke Anderson
School of Social Sciences
University of California
Irvine, Calif. 92717
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PHYSIOLOGIST. Tenure-track position, August 1981, assistant professor or associate professor rank depending on experience. In a department with 36 faculty in a comprehensive university with 25,000 on-campus students. The Ph.D. is required and productive personal research and the direction of graduate students is expected. Active research in radiation biology is highly preferred. To teach human anatomy and physiology one semester and human physiology one semester, and to participate in advanced human physiology lectures one semester per year. Closing date for applications is 15 February 1981. Send curriculum vitae, statement of research goals, and names and addresses of at least three references to: **Jerrold H. Zar, Chairman, Department of Biological Sciences, Northern Illinois University, DeKalb, Ill. 60115.** *The University is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS are available in the Department of Biological Chemistry at the University of California, Irvine. These positions are available for 1 or 2 years studying under the sponsorship of the following faculty members:

Kivie Moldave: genetic and metabolic regulation of translation in eukaryotes; **Calvin S. McLaughlin:** biochemical genetics of RNA and protein synthesis; **Stuart M. Arfin:** genetic and biochemical regulatory mechanisms in mammalian systems; and **John Wasmuth:** biochemical genetics of cultured somatic mammalian cells; cloning eukaryotic genes involved in protein synthesis.

For further information, contact the individual faculty member at: **Department of Biological Chemistry, University of California, Irvine, Irvine, California 92717.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN CONTROLLED ECOLOGICAL SYSTEMS RESEARCH

Position available at the University of California, Santa Barbara, in cooperation with Life Sciences, NASA-Ames Research Center, beginning 1 June 1981. Applications are sought for a postdoctorate to work on the design and theoretical basis for closed and controlled ecological systems with potential application for life support in long-term space travel. Ph.D. in biology with an emphasis on mathematical modeling and ecology required. Research will be done both at University of California, Santa Barbara, and at NASA Research Center near Palo Alto, California. The successful applicant will work with an established group on several team projects.

Applications with curriculum vitae and names of three references should be sent to: **Dr. Daniel B. Botkin, Chairman, Environmental Studies Program, University of California, Santa Barbara, Calif. 93106.** Letters of reference should not be sent until requested. Applications must be postmarked no later than 15 February 1981. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately in rapidly growing biomedical environment for person interested in chemical characterization of testis-specific histones such as H1t [JBC 255, 5949 (1980)]. Interest or background in sequence determination desirable. Laboratory also involved in recombinant DNA techniques. Competitive salary. Send curriculum vitae with names of references to: **W. S. Kistler, Ph.D., Chemistry Department, University of South Carolina, Columbia, S.C. 29208.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN BIO- CHEMISTRY, JOHNS HOPKINS UNIVERSITY

A postdoctoral position is available to study folate enzymology and the regulation of one-carbon metabolism. Experience in enzymology and/or mammalian cell culture desirable. Send curriculum vitae and names of three references to: **Dr. Barry Shane, Department of Biochemistry, Johns Hopkins School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Maryland 21205.**

POSTDOCTORAL RESEARCH ASSOCIATE position is available immediately. Research in the hormonal control of development, growth, differentiation, and tumorigenesis of human breast tissues maintained in athymic mice. Contact: **Dr. Clifford W. Welsch, College of Human Medicine, Michigan State University, East Lansing, Mich. 48842.** Telephone: 517-353-4549. *An Affirmative Action/Equal Opportunity Institution.*

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The deadline for applications is March 30, 1981. Further details and application information can be obtained from Dr. James Hansen (212) 678-5593, at the Goddard Institute for Space Studies, 2880 Broadway, New York, NY 10025.

KING FAISAL UNIVERSITY COLLEGE OF MEDICINE DAMMAM, SAUDI ARABIA FACULTY POSITIONS OPEN 1981-1982

King Faisal University College of Medicine, now in its seventh year, invites applications from qualified men and women for the 1981-1982 academic year in:

CHEMISTRY
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PHYSICS
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PHYSIOLOGY

PATHOLOGY
EPIDEMIOLOGY
MICROBIOLOGY
PARASITOLOGY
PHARMACOLOGY
COMMUNITY
MEDICINE

Doctorate or equivalent degree required. Language of instruction is English. Interviews to be held in London and Houston during February and April 1981.

SALARIES are highly competitive and negotiable; comparable to other Saudi universities.

BENEFITS include free, furnished housing, educational allowances, air tickets to and from Saudi Arabia once each year for a family of four, 60-day paid vacation, liberal overweight allowance. No Saudi income tax. Send curriculum vitae with current telephone number and the names and addresses of three references to:

Dr. Tawfiq Tamimi
Dean, College of Medicine
King Faisal University
c/o Saudi Arabian
Educational Mission
2425 West Loop South
Houston, Texas 77027
OR
c/o P.O. Box 2
Sunbury-on-Thames
Middlesex TW16 5JR
England

CSIRO

RESEARCH SCIENTIST/
SENIOR RESEARCH SCIENTIST
DIVISION OF MATHEMATICS & STATISTICS
ADELAIDE, SOUTH AUSTRALIA
AUSTRALIA

CSIRO has a broad charter for research into primary and secondary industry areas. The Organization has approximately 7,400 employees, 2,500 of whom are research and professional scientists, located in divisions and sections throughout Australia.

FIELD: Computational Mathematics/Computational Statistics.

GENERAL: The Division of Mathematics and Statistics has 104 positions of which approximately 75 are professional scientists. Scientists of the division advise on the mathematical, numerical, and statistical analysis of research projects undertaken by other divisions of CSIRO as well as conducting some basic research.

DUTIES: Consulting and research in computational mathematics in the South Australian region of the division. In particular, the successful applicant will be expected to assist with the use of statistical and mathematical packages such as GENSTAT, GLIM, IMSL, and NAG, develop special algorithms, and be active in computational mathematical research.

QUALIFICATIONS: A Ph.D. degree or equivalent qualification with demonstrable research ability and capacity to do consulting in computational mathematics and to advise on the use of statistical and mathematical packages. Where appropriate, preference will be given to applicants who have had previous experience with statistical computing packages and/or have research experience in optimization.

SALARY: Research scientist/senior research scientist: A\$17,331 to A\$25,177 per annum.

TENURE: Indefinite with superannuation.

APPLICATIONS: In writing and stating full personal and professional details, the names of at least two referees, and quoting reference Number A3534 should reach: The Chief, Division of Mathematics & Statistics, CSIRO, P.O. Box 1965, Canberra City, ACT 2601, Australia, by 9 February 1981.

MOLECULAR BIOLOGIST

Excellent opportunity for PhD Microbiologist (or Biochemist with experience in microbiology) to pursue basic and applied research in bioconversion of biomass, xenobiotic biodegradation, and pathway evolution. Applicants should have experience in recombinant DNA technology and molecular genetics or enzymology. Candidate should have strong academic achievement record, ability to initiate and pursue original research projects, and to contribute to ongoing interdisciplinary life science research programs. We offer a professionally stimulating research environment at an attractive Northeastern location, excellent salary, and benefit plan. Please submit your curriculum vitae and a brief summary of research interests to: **Box 7, SCIENCE.**

An Equal Opportunity Employer

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Heart
Research

JEAN L. MARX and
GINA BARI KOLATA

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POSITIONS OPEN

POSTDOCTORAL, on NIH training grant, Cancer Research Laboratory. Studies of the role of hormones and growth factors in growth and differentiation of normal and malignant human and rodent mammary epithelial cells on collagen gel matrix. Requires strong background in endocrinology and/or immunology. Opportunity to acquire expertise in cell culture, tumor biology. Contact: Dr. S. Nandi, Cancer Research Laboratory, 230 Warren Hill, University of California, Berkeley, Calif. 94720. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION Cell Biology—Endocrinology

Position available for individual interested in the cellular localization of peptide hormones in the testis or pituitary gland. Must have completed Ph.D., experience with thin-sectioning, cell counting, and histochemistry. Excellent opportunity to learn quantitative aspects of hormone synthesis and secretion and gonadal function. Opportunity for teaching is possible. Send curriculum vitae and names of three references to: C. Desjardins, Department of Zoology, Institute of Reproductive Biology, The University of Texas, Austin, Texas 78712.

POSTDOCTORAL POSITIONS in DNA repair: positions available for recent Ph.D.'s in cell biology, biochemistry, or molecular biology to study the regulation of DNA repair in normal and repair deficient human cells. Salary negotiable. Send application with curriculum vitae and names of two references to:

Dr. Michael A. Sirover
Fels Research Institute
Temple University School of Medicine
Philadelphia, Pa. 19140

POSTDOCTORAL IMMUNOLOGY FELLOW

New position in active laboratory interested in autoimmune thyroid disease. Particularly TSH receptor antibodies. Ph.D. in immunological sciences is essential. Work will involve development of plaques assays, cell typing, and immunoglobulin purification. Position to be filled by summer 1981 at the latest. Send curriculum vitae to: Dr. T. F. Davies, Chief, Thyroid Section, Building 23-66, Annenberg, THE MOUNT SINAI SCHOOL OF MEDICINE, One Gustave L. Levy Place, New York, N.Y. 10029.

PROBE TECHNICIAN

The Department of Mineral Sciences at the American Museum of Natural History is seeking a probe technician with primary responsibilities for maintenance; repair, user instruction, operation, and upgrading of an automated nine-channel ARL-SEM microprobe. To a lesser extent, duties will include support for x-ray diffraction equipment, other departmental equipment, sample preparation facilities, and an interdepartmental SEM. Some supervisory responsibilities may also be assigned.

To be considered, candidates should have a good working knowledge of electronics, high-vacuum technology, and minicomputer programming. Desirable areas of training and experience include materials analysis and geology. A master's degree or equivalent experience is an asset. Salary will be competitive based upon qualifications.

Applicants must submit a résumé of training and experience, a statement of salary requirements, and the names of several people familiar with your work to:

Dr. Martin Prinz, Chairman
Department of Mineral Sciences
The American Museum of Natural History
Central Park West at 79th Street
New York, N.Y. 10024

All materials must be received no later than 1 February 1981. An Equal Opportunity/Affirmative Action Employer, M/F/H.

RESEARCH ASSOCIATE

Opening for cell biologist at the postdoctoral level (or equivalent research experience) to work with mammalian cells and embryos, to study cell growth regulation, differentiation, and aging. The position is dependent on federal funds awarded to A. L. Mugleton-Harris. Starting salary is \$13,000 to \$15,000. Send curriculum vitae and names of three references to:

Personnel Office
Worcester Polytechnic Institute
Worcester, Massachusetts 01609

Please respond before 31 January 1981.
An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

DISTINGUISHED PROFESSOR OF RENEWABLE ENERGY RESOURCES UNIVERSITY OF HAWAII AT MANOA

This endowed chair was made possible through a generous gift from Coral Industries, Inc. to provide leadership and expertise in establishing and maintaining academic and research programs of excellence in renewable energy resources. The recipient of this appointment will assist in the development and instruction of new energy courses and programs; engage in research on Hawaii's indigenous energy resources; guide thesis projects; attract extramural research support; interact with both on and off campus groups in furthering knowledge on renewable energy; and provide visibility at both the local and national levels on UHM's quest for excellence in renewable energy instruction and research. The scientist or engineer selected for this position must be a recognized national authority on one of the renewable energy resources indigenous to Hawaii—direct solar, biomass, wind, ocean thermal, geothermal—and his/her experience and qualifications, which should include a doctoral degree in an appropriate discipline, must demonstrate this stature. This will be a joint appointment in the Hawaii Natural Energy Institute and in one of the seven academic colleges on the Manoa Campus. In addition to a salary commensurate with a distinguished professorship, a stipend will be provided for research-related travel and other support services. Closing date for nominations and applications is 1 March, with the position to be filled by 1 July 1981. Inquiries regarding this position may be directed to:

Dr. John W. Shupe
Energy Research Coordinator
University of Hawaii at Manoa
2540 Dole Street
Honolulu, Hawaii 96822

The University of Hawaii is an Equal Opportunity/Affirmative Action Employer.

THE ERNA AND JAKOB MICHAEL VISITING PROFESSORSHIPS

The Weizmann Institute of Science, Rehovoth, Israel, offers a limited number of visiting professorships in the Natural and Exact Sciences.

The Erna and Jakob Michael Visiting Professorships are intended for candidates already holding the rank of full professor and will be for a duration of 3 months to 1 year.

For further information please contact: The Academic Secretary, The Weizmann Institute of Science, Rehovot 76100, ISRAEL.

FORT VALLEY STATE COLLEGE Agricultural Research Station

Position title: **RESEARCH ASSOCIATE.**

Location: Research Station, Fort Valley State College.

Responsibilities: To plan and execute experiments relating to nitrogen fixation systems for the purpose of establishing newer and cheaper methods to produce nitrogen fertilizers.

Requirements: Ph.D. with concentration in inorganic and organometallic (chemistry) with 2 or 3 years of experience in researching nitrogen fixation systems and familiarity with NMR spectrometer, atomic absorption spectrophotometer, L & G chromatographs, inert atmosphere glove box. Infrared, electronic devices. To supervise three laboratory employees.

Salary: \$26,600 per year.

Application procedure: Send résumé, application, college transcripts, and three letters of recommendation to:

Melvin E. Walker, Jr.
Research Director
Fort Valley State College
Box 5744
Fort Valley, Georgia 31030
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POSITIONS OPEN

HARVARD SCHOOL OF PUBLIC HEALTH Professor of Toxicology

Applications and nominations are invited for the position of professor of toxicology. The individual sought should have a proved record of accomplishment in one or more of the following areas: chemistry, bioorganic chemistry, or enzymology. There should be a strong commitment to studies of chemical toxicants and an interest in the training of graduate students and postdoctoral fellows.

Send curriculum vitae, list of publications, names of three references, and a statement of research interests to:

Professor Konrad Bloch
Chairman, Search Committee
Harvard School of Public Health
665 Huntington Avenue
Boston, Massachusetts 02115

Harvard University is an Equal Opportunity Employer with an Affirmative Action Program. Qualified women and members of minority groups are encouraged to apply.

RESEARCH ASSISTANT—Immediate opening for individual with graduate training in biochemistry or related fields. Experience in cell culture is required. Responsibilities include participation in research projects and running of diagnostic tissue culture laboratory. Send letter and résumé to: Owen M. Rennert, M.D., Department of Pediatrics, University of Oklahoma, P.O. Box 26901, Oklahoma City, Oklahoma 73190.

RESEARCH ASSOCIATE. Temporary position for studies of liver associated viruses and their detection. Virology and molecular biology emphasis. Ph.D. required. Salary commensurate with qualifications. Available immediately. Send curriculum vitae to: Edwin J. Hoffman, Division of Molecular Virology and Immunology, Georgetown University, 5640 Fishers Lane, Rockville, Md. 20852.

An Equal Opportunity/Affirmative Action Employer

Two **RESEARCH ASSOCIATE** positions available immediately to study the pharmacokinetics and metabolism of antineoplastic drugs. Background in pharmacology, metabolism, and modern analytical techniques is required. Chemical background preferred but not essential. Please send résumé and three letters of recommendation to: Theresa Paolini Kingsley, Department of Pathology, Room 230, Keiller, University of Texas Medical Branch, Galveston, Texas 77550. An Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE, Ph.D. Blood coagulation interactions involved in contact activation, using physical biochemistry techniques. The approach emphasizes steady-state and rapid reaction kinetics, and fluorescence spectroscopy. Background in protein physical biochemistry and enzymology required. Salary negotiable. Apply to: Dr. Joseph D. Shore, Division of Biochemical Research, Henry Ford Hospital, 2799 West Grand Boulevard, Detroit, Mich. 48202. An Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE. A position is available for a Ph.D. with postdoctoral experience to conduct experiments on nuclear and nucleolar antigens in cancer cells. Postdoctoral experience required: expertise in immunology and/or immunochemistry. Send curriculum vitae and three letters of reference to: Dr. Harris Busch, Department of Pharmacology, Baylor College of Medicine, Houston, Texas 77030. An Equal Opportunity Employer

RESEARCH ASSOCIATE. A position is available for a Ph.D. with postdoctoral experience to organize and conduct experiments on the organization and function of the eukaryotic genome. Postdoctoral experience required: expertise in molecular cloning and DNA sequencing. Send curriculum vitae and three letters of reference to: Dr. Harris Busch, Department of Pharmacology, Baylor College of Medicine, Houston, Texas 77030. An Equal Opportunity Employer.

RESEARCH ASSOCIATE: Two positions available immediately for the study of the regulation of guanylate cyclase and for studies on the regulation of spermatozoa. Send curriculum vitae and three letters of recommendation to: Dr. David L. Garbers, Department of Pharmacology, Vanderbilt University, Nashville, Tennessee 37232. Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.

**COURSES IN BIOLOGICAL SCIENCES
AT THE HOPKINS MARINE STATION
SUMMER 1981**

First Session—15 June to 18 July

100H. Marine Algae. I. Abbott.
An introduction to the marine algae of the Pacific Coast with emphasis on morphology and taxonomy; fieldwork is emphasized.

105H. Subtidal Communities. C. Baxter.
Lecture, laboratory, and diving field trips treating the ecology of local shallow-water marine communities.

111H. Marine Invertebrates. D. Abbott.
Survey of the lower marine invertebrates, echinoderms, and protochordates.

127H. Cell Biology of Early Development. D. Epel, D. Mazia, R. Quatrano.
Emphasis on cellular phenomena during early development of marine organisms. At the postgraduate level, but advanced undergraduates will be considered.

165H. Experimental Neurobiology. S. Thompson and additional staff.

An intensive laboratory and lecture course in cellular neurophysiology. This course is offered to advanced undergraduates and beginning graduate students.

Second Session—20 July to 22 August

112H. Marine Invertebrates (continued). D. Abbott.
Continuation of Course 111H, covering the mollusks, annelids, arthropods, and allied lesser phyla. While the two courses form a continuous sequence, either half may be taken separately when space permits.

113H. Introduction to Oceanic Biology. E. Haderlie.
Introduction to the ocean as an environment; to its major categories of inhabitants, producer and consumer, benthic and pelagic, invertebrate and vertebrate; and to its functioning of the oceanic ecosystem.

160H. Problems in Subtidal Ecology. C. Baxter.
Field problems in subtidal ecology. Normally participants continue for 105H.

For more information and an application form, please write to: **The Academic Secretary, Hopkins Marine Station, Pacific Grove, Calif. 93950.** Applications for the summer session close on 31 March 1981.

Reproductive Cytogeneticist

San Francisco Bay Area

The Lawrence Livermore National Laboratory is an applied science R&D facility, operated by the University of California for the U.S. Department of Energy, and located in a rural suburb of the San Francisco Bay area. We are currently seeking a biomedical scientist to study chemically induced heritable translocations and heritable sperm abnormalities in mice. Duties include design of breeding experiments, cytogenetic and genetic analyses of offspring, and statistical evaluation of results. Scientist to become part of larger, highly interactive group studying the heritable consequences of chemically induced sperm defects in animals and man.

We require a PhD in genetics, cytogenetics, reproductive biology or equivalent. The candidate should have at least one year of direct experience with heritable translocations or germ cell mutagenesis and some knowledge of mammalian breeding techniques.

We invite you to submit your resume in confidence to: **Ted Wilson, Employment Division, Lawrence Livermore National Laboratory, P.O. Box 808, L-425, Dept. KSC-120, Livermore, CA 94550.** U.S. Citizenship is required. We are an equal opportunity employer.

University of California

 **Lawrence Livermore
National Laboratory**

PHARMACOLOGISTS/ BIOCHEMISTS

Pulmonary

Continued expansion of our pulmonary research program has resulted in the following openings.

Research Pharmacologist (Post-Doctoral Fellow)

Requires Ph.D. in Biochemistry with appropriate training and/or experience to research elastin/elastase interaction, and involvement in the etiology of emphysems. Demonstrated competence should include enzyme kinetics and protein isolation and purification. Candidates with two or more years post-doctoral work would be eligible for Research Pharmacologist position; those with Ph.D. and less than 2 years experience would enter as Post-Doctoral Fellow, with opportunity for promotion to senior level within two years.

Post-Doctoral Fellow

Requires Ph.D. in Biology, Physiology, or Pharmacology to conduct research in allergic diseases with emphasis on the mediators of allergic asthma. Should demonstrate competence in *in vitro* pharmacologic techniques, and kinetics of drug-receptor interaction. Familiarity with chemical and biological assay techniques advantageous. Two year appointment, with opportunity for independent research and encouragement to publish results.

Campus setting, 25 miles south of Philadelphia, within walking distance or short commute of choice residential communities. Competitive salaries/benefits include deferred tax-sheltered investment program. Please submit detailed CV in confidence stating position applied for and salary expectations. Principals only.

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Group Product Manager, Chromatography—Responsible for coordinating marketing effort for broad line of liquid chromatography equipment. Ideal candidate will possess B.S. or M.B.A. with minimum of 2 yrs. experience in marketing chromatography products.

Product Manager, Consumables—Responsible for development and implementation of direct mail program for marketing consumable products in the biomedical research area. Ideal candidate will possess minimum 2 yrs. experience in direct mail marketing of high volume products.

Applications Specialist—Responsible for applications work in the areas of electrofocusing and electrophoresis. Ideal candidate will possess B.S. and minimum 1 yr. laboratory experience in electrophoresis.

All positions offer competitive salary and extremely attractive benefits program with the opportunity for further advancement. Positions are located in Rockville, MD and involve limited travel within the U.S. Forward resume to:

Dr. John Bridgen, LKB
Instruments, Inc., 12221
Parklawn Drive, Rockville,
MD 20852.



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THE INCENTIVE GROUP

POSITIONS OPEN

The Geophysics Program at the University of Washington seeks applicants for a **RESEARCH ASSOCIATE** position in space physics, beginning June 1981. The position is supported by research contracts and grants. The applicant should have a Ph.D. and be experienced in x-ray and charged particle detector techniques as applied to space and auroral research, in addition to having good background in space plasma phenomena. Interested persons should send their résumés to: **Dr. George K. Parks, Geophysics Program AK-50, University of Washington, Seattle, Wash. 98195.** The University of Washington is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE

Full-time position available immediately. Salary: \$14,070 for 12 months.

Responsibilities: To conduct the following research: (i) isolate mutant strains of *Salmonella typhimurium* with defective or conditionally non-functional phosphoribosylpyrophosphate (PRPP) synthetase; (ii) characterize such mutants genetically and biochemically; (iii) use such mutants to conduct studies of the active transport and metabolism of nucleic acid precursors to evaluate the role of PRPP in these processes.

Minimum qualifications: Doctor of Philosophy or equivalent in biochemistry or microbiology. Candidate must have at least 2 years of postdoctoral experience in bacterial genetics, metabolic studies with bacteria, and enzymology.

Applicants to report to:

Dr. Robert L. Switzer
Department of Biochemistry
University of Illinois
318 Roger Adams Laboratory
Urbana, Illinois 61801
Telephone: 217-333-3940

Closing date for receipt of application: 30 January 1981.

The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

The **AUSTRALIAN NATIONAL UNIVERSITY** invites application for appointment as **RESEARCH FELLOW AND POSTDOCTORAL FELLOW** (membrane biochemistry and membrane biophysics) Department of Applied Mathematics, Research School of Physical Sciences. Two positions, one as research fellow and one as postdoctoral fellow, are becoming available during 1981 for postdoctoral work within an experimental program, involving collaboration between physicists and biochemists. The program is centered on structure-function relationships in model/reconstituted systems. Interest is currently focused on pure lipid systems and on chloroplast membrane proteins and the mitochondrial cytochrome complexes. Direct force measurements between membranes is also planned. Some experience with freeze-fracture and general electron microscopy might be an advantage. The appointment of a research fellow will be up to 3 years in the first instance with the possibility of extension to 5 years. A postdoctoral fellow will be appointed for 2 years. Applications are welcomed from persons able to take leave from their own institutions. Salary range: \$18,449 to \$24,081 per annum, Australian currency (A\$ = U.S.\$1.16). Reasonable appointment expenses, superannuation, housing assistance. Applications to: **Registrar, P.O. Box 4, Canberra, ACT 2600, AUSTRALIA**, by March 1981.

Institute for Man and Environment
State University of New York
Plattsburgh, N.Y. 12901

SOIL SCIENTIST/HYDROLOGIST

Soil scientist/hydrologist to begin 1 September 1981 for a tenure-track faculty position to teach undergraduate courses in soil science, hydrology, and introductory environmental science on a rotating schedule. Candidates will be expected to conduct research and supervise undergraduate research projects in soils/hydrology at a satellite campus in Chazy, N.Y. Ph.D. preferred. Preference will be given to candidates demonstrating an interest in involving undergraduates in local research. Applicants with degrees in the forest sciences or agricultural engineering with the above qualifications will also be considered. Send résumé and three letters of reference by 20 February 1981 to: **Dr. James C. Dawson, Director, Institute for Man and Environment, State University of New York, Plattsburgh, N.Y. 12901.** (Telephone: 518-564-2178. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

RESEARCH OPPORTUNITIES in GENETIC ENGINEERING

With the Ontario Paper Company Limited, Thorold, Ontario, Canada, to participate at Ottawa, Canada, in basic research related to development of industrially oriented genetic engineering projects in collaboration with National Research Council staff at Ottawa, Ontario, Canada.

Candidates should be trained to the Ph.D. level in molecular genetics, biochemistry (nucleic acid and/or protein synthesis), or microbiology. Other well-qualified applicants with relevant experience will also be considered.

Initial salary up to \$30,000 per annum will depend on formal education and years of relevant experience. Appointments will be up to 3 years.

Candidates should submit curriculum vitae, bibliography, and names of two referees to:

Dr. Allen P. James
Head, Molecular Genetics Group
Division of Biological Sciences
National Research Council of Canada
100 Sussex Drive
Ottawa, Ontario, Canada K1A 0R6
Telephone: 613-992-7833

RESOURCE GEOGRAPHER. Ladder rank, faculty position beginning fall 1980. Resource geographer who bridges the environmental and human aspects of the discipline. Applicant's record should demonstrate significant training and/or experience at both ends of the bridge. Examples of interests that are welcome include (but are not limited to) agriculture/land use, or resources management/policy, or energy development/management. Remote sensing expertise is desirable. Ph.D. required; some teaching experience preferred. Salary and rank commensurate with qualifications. Submit curriculum vitae and names of three referees not later than 1 March 1981 to: **Tom McKnight, Chair, Geography Department, University of California, Los Angeles, Calif. 90024.** Equal Opportunity/Affirmative Action Employer.

SURGICAL PATHOLOGIST (assistant or associate level). Opening available 1 July at the University of Massachusetts Medical Center. Required: AP boards. Preference will be given to applicants with competence in a special field (especially cytology, oncology, hematopathology), demonstrated excellence in teaching, research interests, and/or previous training in clinical pathology or internal medicine. *Applications from women and minorities will be especially welcome.* The University of Massachusetts is an Equal Opportunity Employer. Write to: **Dr. G. Majno, Department of Pathology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, Mass. 01605.**

TERRESTRIAL ECOLOGIST—NATURALIST

Applications invited for postdoctoral resident ecologist-naturalist position. Candidates must have primary interest and training in terrestrial plant community dynamics, plant succession, and/or biogeochemical cycling. Broad interest in natural history and field studies essential. Position located at Biological Station in Northern Michigan; includes coordination of summer seminar on ecosystem management. Position effective May 1981. Send curriculum vitae and names of three references to: **Dr. David M. Gates, Director, The University of Michigan Biological Station, Ann Arbor, Mich. 48109.** A non-discriminatory, Affirmative Action Employer.

LABORATORY OF TREE-RING RESEARCH. Research professor sought to expand microdensitometric facilities and to vigorously pursue a new program using physical and chemical properties of wood in annual rings for paleoenvironmental reconstruction and dating. Required are Ph.D. or equivalent degree and strong background in wood anatomy and environmental plant physiology. Rank and salary will depend on qualifications. Deadline is 1 March 1981. Send curriculum vitae, selected publications, and statement of research interests and directions, with names and addresses of three references to:

Valmore C. LaMarche, Jr.
Densitometry Search Committee
Laboratory of Tree-Ring Research
University of Arizona
Tucson, Arizona 85721

The University of Arizona is an Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.

POSITIONS OPEN

ARE YOU INTERESTED IN WORKING IN SPACE BIOLOGY?

NASA is offering several **RESEARCH ASSOCIATE AWARDS** for scientists to work in NASA-funded laboratories or laboratories capable of providing special training relevant to **SPACE BIOLOGY**. The awards will vary from \$14,000 to \$16,000 based on experience. They are planned for a period of 6 or 12 months with the possibility of renewal. Proposals are due 1 April for 1 July funding and 1 October for 1 January funding. Eligible are postdoctoral U.S. citizens. For information or application forms, contact (specify which award date you are applying for):

Dr. X. J. Musacchia, University of Louisville, Graduate School, Louisville, Kentucky 40292.

Immediate unexpected opening for **STAFF PERSON IN UROLOGY** at level of assistant or associate professor. Individual must be willing to have a primary commitment to male infertility. Background must include basic science training in area compatible with research interest in some area of male infertility. Individual must be desirous of and capable of generating own research support. Past infertility fellow or AUA scholar preferred. *An Equal Opportunity/Affirmative Action Employer.* Send copy of curriculum vitae and three letters of reference to: **Alan J. Wein, M.D., Division of Urology, University of Pennsylvania School of Medicine, 5-Silverstein, 3400 Spruce Street, Philadelphia, Pa. 19104.**

SYMPOSIUM

MOLECULAR INTERRELATIONS OF NUTRITION AND CANCER—34th annual Research Symposium in Houston, 4 to 6 March. To cover physiological effects in cancerous host; energy metabolism in tumor cells; nutritional modulation of cell proliferation; and carcinogenesis. Co-chairs: **Doctors M. Arnott, J. van Eys, and Y. M. Yang.** Contact: **Steve Stuyck, c/o M. D. Anderson Hospital, Houston, Texas 77030; telephone: 713-792-3030.**

COURSE

Twenty-Second Annual Course in Medical Genetics and Experimental Mammalian Genetics. Directors: **Victor A. McKusick, M.D., and Thomas H. Roderick, Ph.D.** Location: The Jackson Laboratory, Bar Harbor, Maine. Time: 20 to 31 July 1981.

First conducted in 1960, this course has been supported throughout by The March of Dimes Birth Defects Foundation and conducted as a joint enterprise of the Johns Hopkins University and the Jackson Laboratory. Persons may apply for the course by writing to either: **Dr. Victor A. McKusick, The Johns Hopkins Hospital, Baltimore, Md. 21205**, or **Dr. Thomas H. Roderick, The Jackson Laboratory, Bar Harbor, Maine 04609.**

SUMMER PROGRAM

SEVENTH SUMMER PROGRAM IN METHODS OF IMMUNOLOGIC RESEARCH AND DIAGNOSIS

The seventh biennial program on current methods of immunologic research and diagnosis will be offered by The Ernest Witebsky Center for Immunology of the State University of New York at Buffalo, 1 to 13 June 1981. This will consist primarily of a combination of core and elective practical laboratory exercises to allow the participant to become acquainted with the techniques by personally carrying them out at the bench complemented by demonstrations, lectures, and discussions. The entire program is designed to provide the participant with a survey of presently available methodology and insight into the underlying immunologic principles. It is open to individuals at the postdoctoral level, supervisory senior technologists, and graduate students beyond the master's level.

Further information may be obtained from: **James F. Mohn, M.D., Director, The Ernest Witebsky Center for Immunology, State University of New York at Buffalo, 210 Sherman Hall, Buffalo, New York 14212; telephone: 716-831-2848.** The deadline for application is 31 March 1981.

The Office of Research and Development, U.S. Environmental Protection Agency (EPA), is seeking candidates for positions under the mobility provisions of Title IV, Intergovernmental Personnel Act of 1970. These positions will be filled from the following disciplines: **BIOSTATISTICS, CHEMICAL ENGINEERING, EPIDEMIOLOGY, INDUSTRIAL ENGINEERING, MINING ENGINEERING, MOLECULAR BIOLOGY, OPERATIONS RESEARCH, PHYSICS, SYSTEMS ECOLOGY, and TOXICOLOGY.**

Qualifications include an advanced degree in one of the above disciplines; postdoctoral training or actual engineering experience is highly desirable. Other factors to be considered are: interest and experience in environmental research; ability to identify and analyze future environmental research; ability to initiate and monitor scientific research related to EPA's mission; interest and experience in interdisciplinary research policy analysis; and excellent communication skills.

Assignment will be with the Office of Strategic Assessment and Special Studies in Washington, D.C., for 1 year, but may be extended for one additional year. The Office's responsibilities include providing information on long-range environmental trends and problems to participants in the Agency's R & D planning and policy-making process. The Office conducts and sponsors programs designed to: (i) provide a comprehensive overview of long-range environmental trends; (ii) expand existing data bases and promote increased understanding of long-range environmental trends; and (iii) identify, develop, and evaluate concepts, methods, and models designed to enhance understanding of potentially significant future environmental problems and opportunities.

Salary is negotiable and competitive.

Persons wishing to apply should send a brief statement of interest and a current résumé to:

John W. Reuss
Office of Exploratory Research
Office of Strategic Assessment & Special Studies
RD-675
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

Deadline for applications is 1 February 1981. Assignments must begin no later than September 1981.

Applications from women and minorities are encouraged.

FACULTY POSITION— FOREST MANAGEMENT UNIVERSITY OF CALIFORNIA, BERKELEY

Position—The position can be filled at the assistant, associate, or full professor level, depending on the qualifications of the individual. Appointment will be on an 11-months-per-year basis, with the duties half in teaching and half in research.

Qualifications—Applicants must have a degree in forestry, either at the bachelor's or master's level, and a Ph.D. with specialization in forest management, forest economics, operations research, systems analysis, or business administration. Doctoral candidates expecting to complete the degree by the end of 1981 are encouraged to apply. A strong background and interest in forest management, including regulation of the growing stock and the allowable cut, and in long-term planning is expected.

Responsibilities—(i) Teaching, including a senior course in forest regulation and management, a graduate course in the use of operations research methods in forest management, and a third course to be assigned on the basis of departmental needs, and (ii) research, including studies in areas such as production relationships, timber harvest scheduling, interactions between timber management and other resource values, and managerial aspects of forestry operations.

Appointment—The department plans to fill the position with the applicant believed to have the highest potential for developing leadership in forest management, without regard to the level of appointment for which the selected candidate is qualified. The position is available 1 July 1981, but the reporting date is open to negotiation.

Applications—Applications will be considered if received prior to 15 March 1981. A letter of application, résumé, list of publications, academic transcripts, and the names of three or more persons as references should be sent to:

Chairman of Search Committee (Forest Management)
Department of Forestry and Resource Management
145 Mulford Hall
University of California
Berkeley, California 94720

Interested persons are invited to obtain additional information on the position and related matters by **telephoning (collect) 415-642-0376**.

The University of California is an Affirmative Action Employer.

SQUIBB



RESEARCH ASSOCIATES Pharmacology

E.R. SQUIBB & SONS, INC., an established leader in the pharmaceutical industry is seeking individuals to conduct basic cardiovascular research for new drug development. The qualified applicants will have recently received an MS Degree in Pharmacology or Physiology or will have a Bachelor's Degree or equivalent in either discipline with 1 to 2 years experience in the cardiovascular area. You must also have lab experience working with animals.

These challenging positions which include an excellent starting salary, liberal benefits package and exceptional work environment are a unique opportunity for the right individuals. Please submit resume including salary requirements in confidence to: **Mrs. Peggy Dally, Department JP, E.R. Squibb & Sons, Inc., P.O. Box 4000 Princeton, N.J. 08540.** An Equal Opportunity Employer, M/F/H/V.

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Excellent salaries and benefits. Major pharmaceutical and health care companies. All fees paid.

Must Have Prior Industry Experience.

PhD Recombinant—D.N.A.	to 45K
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PhD Genetic Toxicologist	to 35K
PhD Fermentation Microbiologist	to 40K
BS or MS Toxicologist	to 28K
PhD Analytical Chemist	to 38K
BS or MS Analytical Chemist	to 30K
BS Information Scientist	to 25K
BS Medical Writer—write, edit NDA, IND	to 27K
PhD Pharmacologist—Phases I thru IV	to 50K
PhD Pharmacologist—Cardiovascular and Anti-Hypertensive	to 35K
PhD Pharmacologist—Myocardial Infarction, Anti-coagulants	to 35K
PhD Biochemist—Pharmaceutical	to 35K
PhD Pharmacist—Liquid and semi-solid	to 32K
PhD Infectious Diseases—Assistant Director Phase II & III	to 56K
BS Pharmacist—Sterile Products—Manufacturing	to 33K
BS, MS Pharmacist Liquid and semi-solid	to 28K
BS, MS Microbiologist Sterile and Non-Sterile	to 30K
PhD Microbiologist	to 40K
BS, MS Microbiologist—Director QC/QA	to 40K
BS, MS Microbiologist—Manager QC	to 28K
PhD Scientist Pulmonary Physiology	to 45K
BS, CRA	to 32K
BS, MS, Head CRA	to 40K
BS, Sr. Production Supervisor, Sterile & Liquid Dosage	to 32K
PhD Drug Reg. Affairs	to 45K
BS, Manager Drug Reg. Affairs	to 32K

Send resume in confidence with current salary, geographical limitations, and type of position to:



Gary S. Bell Associates, Inc.
393 Crescent Avenue
Wyckoff, N.J. 07481
(201) 891-5900

Attn.: Allen Cayne, Executive V.P.

GRADUATE STUDY

GRADUATE STUDIES IN CHEMISTRY AND IN BIOCHEMISTRY. Fellowships, teaching and research assistantships are available for highly qualified applicants. Stipend for 1981-1982 (including summer) are expected to be up to \$7850 in addition to the remission of tuition and most fees. Write to: **Director of Graduate Studies, Department of Chemistry, University of Illinois, Chicago Circle Campus, P.O. Box 4348, Chicago, Illinois 60680.**

TRAINEESHIPS

PREDOCTORAL AND POSTDOCTORAL TRAINING IN MOLECULAR VIROLOGY. Several predoctoral and postdoctoral traineeships are available for qualified applicants through NIH training grants. Preceptors include: Drs. G. M. Air, J. C. Bennett, D. H. L. Bishop, R. W. Compans, E. Hunter, E. Lamont, J. Lebowitz, J. Mole, P. Roy, and J. P. Segrest. Research areas include: virus structure, genetics and replication, and viral immunology and membrane biology. Send applications and inquiries to: **Dr. R. W. Compans, Department of Microbiology, University of Alabama in Birmingham, Birmingham, Ala. 35294. An Affirmative Action/Equal Opportunity Employer.**

VIROLOGY

POSTDOCTORAL TRAINEESHIPS in biochemical genetics of phage and tumor viruses at The University of Michigan Medical School are now available through an NIH funded interdisciplinary program. Research areas include animal cell transformation, tumor virus and phage DNA replication and recombination, regulation of gene expression, morphogenesis, and virus-cell interactions. Applicants need not have previous research experience in virology. Contact one of the following faculty: **Dr. William R. Folk, Dr. G. R. Greenberg (Department of Biological Chemistry); Dr. William Brockman, Dr. D. I. Friedman, Dr. D. Jackson, Dr. E. Jackson (Microbiology); Dr. M. Levine (Human Genetics) at The University of Michigan Medical School, Ann Arbor, Mich. 48109. A nondiscriminatory, Affirmative Action Employer**

FELLOWSHIPS

DOCTOR OF ARTS IN BIOLOGY: FELLOWSHIPS are available for qualified persons interested in the D.A. degree in biology. The program stresses preparation for undergraduate teaching at colleges and universities. Applicants should hold a master's degree in some area of biology. Deadline for receipt of application is 1 March 1981. For more information contact: **Dr. Donald P. Streubel, Chairman, D.A. Committee, Department of Biology, Idaho State University, Pocatello, Idaho 83209. An Equal Opportunity Employer.**

PRE- AND POSTDOCTORAL FELLOWSHIPS in neurophysiology; studies in brain metabolism utilizing microelectrodes.

Dr. James Halsey
Department of Neurology
University of Alabama Medical Center
Birmingham, Ala. 35294
Telephone: 205-934-2400
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CARDIOVASCULAR RESEARCH FELLOWSHIP. Postdoctoral fellowship position for research training in:

- 1) Physiology, pathophysiology, and pharmacology of cardiac and skeletal muscle,
- 2) Reflex control of circulation,
- 3) Ultrasound—Clinical and basic,
- 4) X-ray videometry; three-dimensional reconstruction,
- 5) Atherosclerosis; platelet inhibitors; hypertension and
- 6) Computer applications in clinical cardiology.

Position available immediately, with additional positions opening in July 1981, for candidates with M.D. or Ph.D.; competitive stipend. May combine with advanced clinical training in cardiovascular medicine. Contact: **Robert G. Tancredi, M.D., Director, Cardiovascular Research Training Program, Mayo Clinic, Rochester, Minn. 55901.**

An Equal Opportunity/Affirmative Action Institution

FELLOWSHIPS

THE OPEN UNIVERSITY FACULTY OF SCIENCE RESEARCH FELLOWSHIP (BRAIN RESEARCH GROUP) (TEMPORARY)

Applications are invited for a temporary post as research fellow to join the Brain Research Group in the Biology Discipline at the Open University.

The successful candidate will be expected to pursue own line of research within the interests of the group and also to collaborate on existing projects, which include the neurochemical correlates of developmental plasticity and early learning, the role of glycoproteins in synaptogenesis and synaptic function, and the development of transmitter systems.

Candidates should hold a Ph.D. degree in biochemistry/cell biology. Experience in neurochemistry will be an advantage.

The post is available immediately for a period of 2 years, with the possibility of renewal for a further year. Salary will be on the Research and Analogous 1A scale: £5505 to £9595 per annum (under review). An appointment will be made within the range £5505 to £7725 per annum on the 1A scale.

Further particulars and application forms are available from: **Assistant Secretary (Science) (4152/2), The Open University, Walton Hall, Milton Keynes, MK7 6AA, England, or telephone: Milton Keynes 653481.**

MEDICAL GENETICS: POSTDOCTORAL FELLOWSHIPS available for Ph.D.'s or M.D.'s, within an active interdepartmental program of research, teaching, and clinical service. There will be openings in clinical genetics and in biochemical genetics during 1981. For further information, contact: **R. M. Bannerman, M.D., Division of Human Genetics, Children's Hospital of Buffalo, 86 Hodge Avenue, Buffalo, N.Y. 14222, to whom résumés and the names of three references may be sent.**

POSTDOCTORAL FELLOWSHIPS

National Research Service Awards (NIH), available for Ph.D., M.D., or D.D.S.

Areas of interest include biochemical, clinical cyto, molecular, and population genetics.

David Bixler, D.D.S.

OR

Catherine G. Palmer, Ph.D.
Department of Medical Genetics
Indiana University School of Medicine
1100 West Michigan Street
Indianapolis, Indiana 46223

POSTDOCTORAL FELLOWSHIPS IN PATHOBIOLOGY UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE

Research opportunities are offered to candidates interested in a variety of fields of biomedical research. In order to maximize the interdisciplinary nature of the research projects, a trainee will work jointly with a member of the Department of Pathology and with a member of the Departments of Anatomy and Cell Biology, Biochemistry, Microbiology, or Physiology. Some of the major areas of research include: (i) immunogenetics, (ii) immunology and genetics of reproduction, (iii) regulation of DNA synthesis in malignant and normal cells, (iv) somatic cell genetics, (v) metabolism of carbohydrates in normal and transformed cells, (vi) chemical carcinogenesis, (vii) temperature sensitive virus mutants in neurological infections, (viii) pathogenesis of Hemophilus influenza infections and the genetics of susceptibility, (ix) intestinal ion transport and its alteration by hormones and bile salts, (x) pathogenesis and physiology of inflammatory bowel disease, (xi) biochemistry of carbohydrates in congenital storage diseases, and (xii) biochemical, ultrastructural, and immunochemical studies on cell membranes with particular emphasis on cell surface antigens.

The program is administered by a committee composed of **R. E. Basford (Biochemistry), Thomas J. Gill III (Pathology, chairman), Christopher C. Widnell (Anatomy and Cell Biology), and Julius S. Youngner (Microbiology).** Stipends, travel, and supplies will be provided by an NIH Training Grant in Pathobiology. Applications indicating the area of research interest should be sent to: **Dr. Thomas J. Gill, III, Department of Pathology, University of Pittsburgh School of Medicine, Pittsburgh, Pa. 15261.** The decisions will be made as soon as possible for the academic year beginning 1 July 1981. *An Equal Opportunity/Affirmative Action Employer.*

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS. The University of Chicago is now accepting applications for postdoctoral fellowships in behavioral biology for the 1981-1982 fiscal year. Application instructions and program information can be obtained from: **Professor Stuart Altmann (Program Director), Department of Biology, University of Chicago, 1103 East 57 Street, Chicago, Ill. 60637.**

POSTDOCTORAL FELLOWSHIPS IN CANCER RESEARCH. The University of Rochester Cancer Center invites applications for a postdoctoral program which provides laboratory research training in a specific area of basic cancer research, and provides in addition systematic instruction in the biology and biochemistry of cancer. The goal of the program is to give the fellows a solid practical and conceptual background for a career in cancer research. The program is conducted in an integrated research and clinical setting and is designed to include both trainees with the Ph.D. degree and trainees with the M.D. degree who intend to pursue an academic career in oncology. Applicants are requested to send their curriculum vitae, a brief statement of their research interests and career goals, and three letters of reference to: **Dr. Edgar C. Henshaw, University of Rochester Cancer Center, 601 Elmwood Avenue, Rochester, N.Y. 14642.**

POSTDOCTORAL FELLOWSHIPS

Department of Biology
Harvard University

A limited number of postdoctoral research positions become available from time to time. Appointments are funded through research grants awarded to faculty members and are usually for 1 year, sometimes renewable. For a list of faculty members who have postdoctoral positions available, write, but do not send applications, to:

Office of the Chairman
Department of Biology
16 Divinity Avenue
Cambridge, Mass. 02138

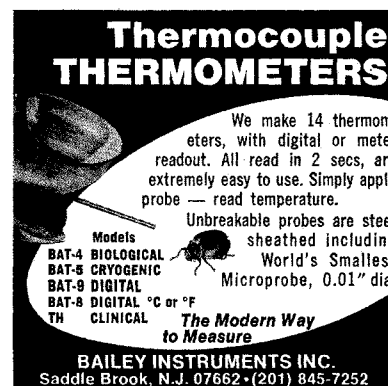
Harvard University is an Equal Opportunity/Affirmative Action Employer.

NIH FELLOWSHIPS IN HEALTH COMPUTER SCIENCES

Predocctoral, postdoctoral, and postprofessional National Library of Medicine fellowships for training in the application of computers in health fields are available starting 1 July 1980. Predocctoral candidates should have a master's degree in the natural sciences; postdoctorals should have a Ph.D. in the natural sciences or an equivalent professional degree; health professionals should have a bachelor's or equivalent professional degree. Applicants must be U.S. citizens or permanent residents and should send curriculum vitae, professional objectives, transcripts, and three letters of recommendation by 2 March to: **Dr. Lynda Ellis, Box 511, Mayo Memorial Building, University of Minnesota Medical School, Minneapolis, Minn. 55455.**

The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

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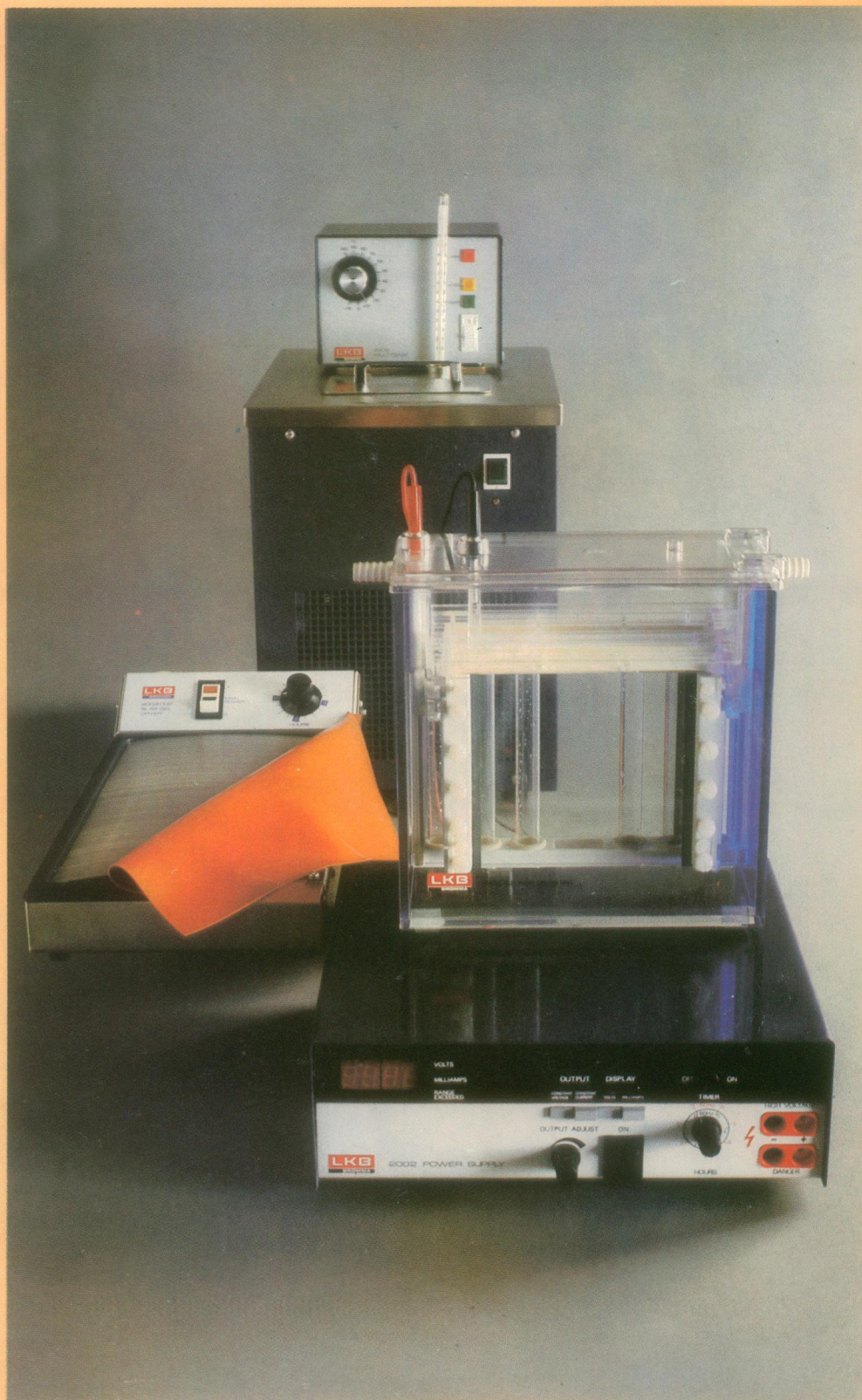
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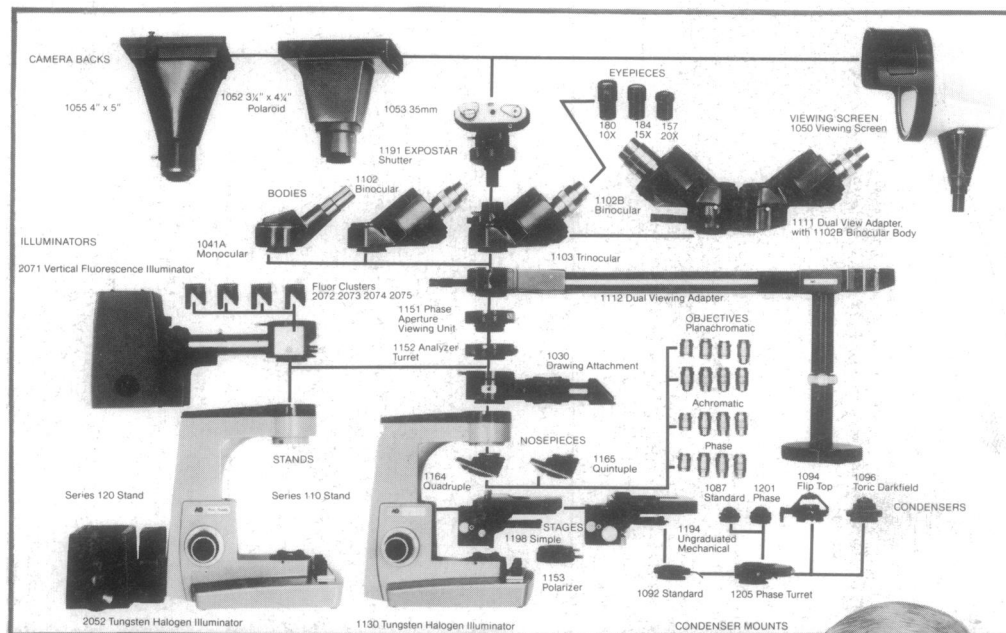
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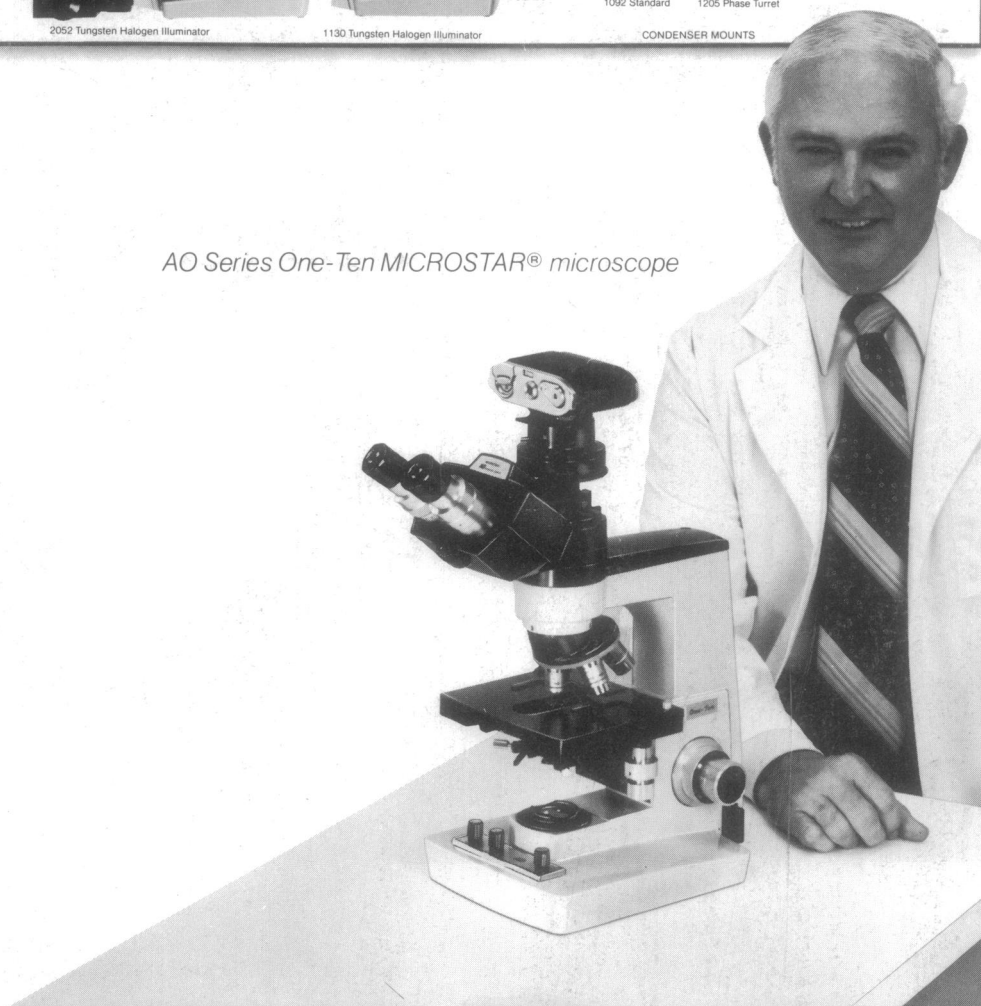
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The advanced One-Ten is widely accepted. Users like its contemporary styling and smooth, rich finish. But most of all, they like its performance and many features: the magnificent illumination from the bright tungsten-halogen illuminator with continuously variable intensity; the fine AO optics that give a flat edge-to-edge image over a 20mm field of view; the focusable nosepiece that allows the stage to remain secure and solid; the convenient low positioning of the coaxial coarse and fine focusing controls; plus much more.

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